REPORT RESUMES

ED 013 224 SE 003 099

AMERICAN SCIENCE MANPOWER, 1964--A REPORT OF THE NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL.
BY- LEVINE, MILTON AND OTHERS
NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.
REPORT NUMBER NSF-66-29 PUB DATE 66
EDRS PRICE MF-$1.00 HC-$9.08 227P.

DESCRIPTORS- *HUMAN RESOURCES, *INDIVIDUAL CHARACTERISTICS, *OCCUPATIONAL INFORMATION, *SCIENTIFIC MANPOWER, *SURVEYS, AGRICULTURE, BIOLOGY, CHEMISTRY, COLLEGE SCIENCE, EARTH SCIENCE, ECONOMICS, EMPLOYMENT EXPERIENCE, EDUCATIONAL BACKGROUND, FEMALES, GEOGRAPHIC DISTRIBUTION, LINGUISTICS, MATHEMATICS, MALES, PERSONNEL DATA, PHYSICS, PSYCHOLOGY, SALARIES, SCIENTISTS, SCIENCE TEACHERS, NATIONAL SCIENCE FOUNDATION

INFORMATION FROM THE 1964 NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL ON THE SUPPLY, UTILIZATION, AND CHARACTERISTICS OF THE NATION'S SCIENTIFIC MANPOWER RESOURCES IS REPORTED. A QUESTIONNAIRE WAS USED TO OBTAIN DATA FROM 224,000 PERSONS INCLUDING (1) KNOWN QUALIFIED SCIENTISTS, (2) RECENT GRADUATES OF COLLEGE SCIENCE PROGRAMS, (3) MEMBERS OF PROFESSIONAL ORGANIZATIONS, (4) SUBSCRIBERS TO PROFESSIONAL JOURNALS, AND (5) NON-MEMBER REGISTRANTS OF PROFESSIONAL MEETINGS. FIELDS COVERED INCLUDED AGRICULTURE, BIOLOGY, PSYCHOLOGY, CHEMISTRY, EARTH SCIENCE, PHYSICS, ASTRONOMY, MATHEMATICS, METEOROLOGY, ECONOMICS, LINGUISTICS, SOCIOLOGY, AND STATISTICS. THE INFORMATION IS PRESENTED IN FOUR SECTIONS COVERING A WIDE RANGE OF SUBJECTS. THESE INCLUDE EDUCATIONAL BACKGROUND, EMPLOYMENT, SALARIES, AND GEOGRAPHIC DISTRIBUTION. GENERAL CHARACTERISTICS OF ALL REGISTERED SCIENTISTS ARE REPORTED IN PART I OF THE REGISTER. PART II SUMMARIZES IN MORE DETAIL THE MAJOR CHARACTERISTICS OF THE SCIENTIFIC POPULATION. PART III INCLUDES A SERIES OF SELECTED STATISTICAL TABLES THAT PERMIT COMPARISON OF RELATIONSHIPS BETWEEN TWO VARIABLES FOR A NUMBER OF SEPARATE SUBPOPULATIONS. APPENDIXES INCLUDE (1) DETAILED DATA FROM WHICH DATA USED IN OTHER PARTS OF THE REPORT WERE SELECTED, (2) A COPY OF THE QUESTIONNAIRE USED IN THE SURVEY, (3) A LIST OF SUBFIELDS INCLUDED IN EACH SCIENTIFIC AND TECHNICAL FIELD, AND (4) A LANGUAGE FAMILY LIST. A SUBJECT GUIDE TO SPECIFIC INFORMATION ON THE NUMBERS AND SALARIES OF SCIENTISTS IS INCLUDED. THIS DOCUMENT IS AVAILABLE AS NSF 66-29 FOR $1.25 FROM THE SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402. (AG)

ED013224

AMERICAN SCIENCE MANPOWER 1964

A Report of the
National Register
of Scientific and
Technical Personnel

NATIONAL SCIENCE FOUNDATION
NSF 66-29

AMERICAN SCIENCE MANPOWER 1964

A Report of the
National Register
of Scientific and
Technical Personnel

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

NATIONAL SCIENCE FOUNDATION
NSF 66-29

Foreword

This report continues the periodic reporting of data collected through the National Register of Scientific and Technical Personnel. The emphasis in this report is on presenting statistical information in forms to suit varying needs for understanding the characteristics of scientific manpower. Data supplied directly by approximately 224,000 individual scientists on a voluntary basis are tabulated in detail on education, employment, scientific specializations, and other characteristics. Of those to whom questionnaires were sent, 64 percent responded.

As a comprehensive program for the registration of scientists in the United States, the National Register is a major source of data useful for the Federal Government, industry, and higher education in formulating science policies and planning operations. The Foundation, in striving to make the National Register a more effective manpower tool, also plans to study the representativeness of scientists in the National Register in relation to the total science population, to study reasons for the failure of 36 percent to respond, and to seek means for improving response rates. In addition, a series of studies is being designed to reveal the patterns of academic training and careers of scientists. Data obtained by the National Register over the past 10 years provide materials for studies of the long-term interrelationships among the many factors involved in academic training, employment, and mobility of scientific manpower. These studies will be helpful in developing trends on the changing character of the scientific community.

The National Science Foundation gratefully acknowledges the cooperation of the Nation's scientists who voluntarily responded to the National Register as well as the cooperation of the participating scientific societies. Responsibility for the National Register of Scientific and Technical Personnel is assigned to the Foundation's Office of Economic and Manpower Studies, H. E. Riley, Head, with general supervision by Thomas J. Mills, Head, Sponsored Surveys and Studies Section.

LELAND J. HAWORTH
Director, National Science Foundation

AUGUST 1966

ACKNOWLEDGMENTS

Milton Levine, Study Director, National Register of Scientific and Technical Personnel, planned and prepared this report with the assistance of Y. Ann Carmel and Suzanne M. Duval. George Dan Clark, Manager of the National Register Records Center, was responsible for the data-processing activities carried out at North Carolina State University, in Raleigh. The 1964 National Register was coordinated by J. James Brown. The following organizations cooperated with the National Register in 1964: American Chemical Society, American Economic Association, American Geological Institute, American Institute of Biological Sciences, American Institute of Physics, American Mathematical Society, American Meteorological Society, American Psychological Association, American Sociological Association, Center for Applied Linguistics of the Modern Language Association of America, Federation of American Societies for Experimental Biology, and, through these organizations, other specialized societies.

CONTENTS

Page

- **Introduction** 1
  - Registration Process 1
  - Scope of National Register Data 2
  - Comparison With Other Data 2
  - Uses of National Register Data 3
  - Organization of the Report 3
- **Subject Matter Guide** 5
- **Part I. Graphic Highlights of 1964 National Register** 11
  - General Characteristics of Scientists 13
  - Median Annual Salaries of Full-Time Employed Civilian Scientists 18
- **Part II. Summaries of Major Characteristics** 21
  - Scientists With Ph. D. Degree 23
  - Scientists With Master's as Highest Degree 26
  - Scientists With Bachelor's as Highest Degree 29
  - Scientists Employed in Educational Institutions 32
  - Scientists Employed in Industry and Business 35
  - Scientists Employed in the Federal Government 37
  - Scientists Employed in Nonprofit Organizations 39
  - Salaries of Full-Time Employed Civilian Scientists 41
    - Highest Degree 41
    - Age 41
    - Type of Employer 42
    - Primary Work Activity 42
    - Years of Professional Experience 43
  - Geographic Location of Scientists 44
    - Selected States 44
    - Selected Standard Metropolitan Statistical Areas 44
  - Scientists With Foreign Language Knowledge 45
    - Scientific Field 45
    - Foreign Language Proficiency 45
  - Scientists With Foreign Area Knowledge 46
    - Scientific Field 46
  - Scientists Receiving Federal Support 47
    - Scientific Field 47
    - Highest Degree 47
    - Type of Employer 48
  - Women Scientists 49
    - Scientific Field 49
    - Highest Degree 49
    - Type of Employer 50
    - Primary Work Activity 50
    - Years of Professional Experience 51
    - Salaries of Full-Time Employed Women Scientists 51

Page
Part III. Selected Tables 53

Appendices
- A. Detailed Statistical Tables 81
- B. 1964 Questionnaire and Specialties List 205
- C. Subfields Included in Each Scientific and Technical Field 213
- D. Language Family List Used by the National Register in 1964 215
- E. Foreign Area List Used by the National Register in 1964 217

Introduction

This publication brings together information from the 1964 National Register of Scientific and Technical Personnel on the supply, utilization, and characteristics of the Nation's scientific manpower resources. The information is presented in four progressively detailed sections of statistical summaries covering a wide range of subjects, including education, employment, salaries, and geographic location of U.S. scientists. The 1964 National Registration is one of a series conducted by the National Science Foundation to make available timely information on qualified personnel in critical science fields. Earlier studies were conducted for 1954, 1956–58, 1960, and 1962.

To make the most effective use of the data in this publication, the reader should be aware of the collection and analysis procedures of the National Register, and how the statistical data are presented in this report. These features are described in this introduction.

Registration Process

The National Register of Scientific and Technical Personnel is maintained as a cooperative undertaking of the National Science Foundation and the scientific community, as represented by the scientific professional societies. Within this framework the Foundation develops uniform standards and procedures, and the cooperating professional societies undertake to identify and locate qualified scientists to insure the most complete coverage possible of eligible personnel. Scientists are considered eligible for inclusion in the National Register if they have "full professional standing," as determined by the appropriate scientific society, whether or not they are members of a professional society.

The eligibility criteria vary among the societies, and in some fields the scope for inclusion is broad. For example, the American Chemical Society considers a person with a bachelor's degree in chemistry, and employed in a position requiring a knowledge of chemistry, a qualified chemist. In the field of experimental biology, on the other hand, the Federation of American Societies for Experimental Biology considers as fully qualified only those who hold the doctorate and have several years of research experience. These varying standards should be kept in mind when comparing the numbers of individuals in the different scientific fields.

In an attempt to obtain complete coverage of the scientific community, all known qualified scientists were requested to respond to the National Register questionnaire (appendix B). Also included in the mailing lists are potentially qualified persons, such as recent graduates with science baccalaureate degrees, subscribers to professional publications, and nonmember registrants at professional meetings.

In 1964, society mailing lists included 440,000 names of professional society members and others identified as having a technical interest in one of the natural or selected social science fields within the scope of the National Register. Duplicate names identified subsequently reduced this list to approximately 415,000 individuals. Of this number, 265,000 returned questionnaires, and 150,000 were nonrespondents. Those providing incomplete information or not meeting registration criteria totaled 41,000; thus, 224,000 persons are represented in the data reported in this study. In proportionate terms, 64 percent of the individuals on the lists compiled by the cooperating societies returned questionnaires, and 15 percent of the returned questionnaires were incomplete or lacking in full professional qualifications.

To determine the characteristics of the nonrespondents, a sample based on geography and discipline has been developed and plans are underway to conduct a field study. Until this study has been completed, the degree to which the respondents are representative of the entire scientific community is uncertain.

The coverage of the National Register has been continually improving, and it is estimated that the 1964 registration included over 90 percent of the Nation's science doctorates. Although the proportion varies in different scientific areas, it is believed that about 75 percent of those qualified for inclusion are in the National Register.

Scope of National Register Data

In 1964 the fields covered by the National Register included the life and physical sciences and, for the first time, selected social science fields. Specifically, agricultural and biological sciences and psychology are included in the life sciences. Physical science coverage included chemistry, earth sciences, physics, astronomy, mathematics, and meteorology. The social sciences included economics, linguistics, and sociology. The field of statistics included individuals from both the natural and social sciences.

Respondents reported areas of scientific competence based on both education and work experience, professional identification (e.g., biologist, chemist, or physicist), major subject of highest degree, and current field of employment. The principal basis for classifying National Register data in this report was the field of greatest scientific competence as reported by the respondent. This basis was used on the assumption that an individual's field of specialization has more stability over an extended period of time, whereas the major subject of academic training alone may not take into account the influence of work experience. Moreover, the employee's job title may not be sufficiently indicative because of variations in definitions and methods of classifying jobs. Professional identification may rest on any of these factors and, at best, tends to represent the individual's personal view at any given time. Tables 46, 47, and 48 show numbers of scientists reporting highest level of competence in each scientific or technical field and, in turn, professional identification, major academic subject, and field of employment.

Approximately 1,100 specific specialties (appendix B) were grouped into some 100 subfields and, in turn, 13 major scientific and technical fields (appendix C). Since the data are presented at both field and subfield levels, various combinations can be chosen to make up other major fields. Thus, the characteristics of persons in biochemistry can be studied independently or as a component in the field of either biology or chemistry. There are indications from the responses to the 1964 National Register that some individuals who were trained in one scientific field reported specialties in other fields and were employed in still another. A special study of these data will be undertaken at a later date.

Comparisons With Other Data

The National Register count of scientists differs from other published estimates (e.g., Bureau of the Census and Bureau of Labor Statistics) principally because of differences in fields included, reporting methodology, definitions, and time references, in addition to the nonresponse element previously noted.

The 1964 National Register included only those in selected social sciences in addition to the traditional natural science fields. Other published estimates frequently include among the social scientists those in anthropology, political science, and history, which were not included as separate fields in the 1964 registration. Anthropologists will be included for the first time in the 1966 registration data.

The Bureau of Labor Statistics estimates are based upon an employer-reporting "working as" methodology. Employer reports of scientists are added together to provide an estimate based on BLS occupational definitions. However, the employing establishments' classification practices, in adhering to these definitions, are far from uniform, and may be said to produce statistical totals which conform to a payroll classification system rather more closely than to a scientific qualifications system. There is also an element of duplication to the extent that scientists are engaged in more than one job. The National Register method of collecting information from the individual scientists permits the removal of duplications and seems likely to assure that only qualified scientists are counted.

Estimates based on employer reporting usually define scientists as those whose jobs require at least a science baccalaureate degree or "equivalent training" and who are engaged in a scientific activity. Sometimes such counts are further limited to those engaged in research and development. The National Register qualifies a scientist in terms of "scientific competence" and he is further evaluated in terms of professional standing within his field by the appropriate professional society.

Time reference differences are important in some comparisons. For example, the Census of Population data on scientific occupations are ordinarily available only at decennial intervals. Periodic sample census surveys of households are useful in providing data on large segments of the population, but ordinarily provide insufficient occupational detail to compare with other counts of scientists.

The three systems for collecting manpower information (i.e., individual, employer, and household) are designed to meet different needs and do not count exactly the same groups. Comparability among statistics available from these sources is affected by the reasons cited above and differences in counts are sometimes large, as shown in the following comparisons:

National Register (1964).	224, 000	Natural and selected social scientists.
Bureau of Labor Statistics (1963).	361, 000	Natural scientists only.
Bureau of the Census (1960).	275, 000	Natural and social scientists.

Plans to make the National Register data a more effective manpower tool for statistical purposes provide for comparisons of data collected through the employer and household approaches. Such studies should provide a basis to understand better the relationship of manpower information collected via these different approaches. As more experience is gained with these data, it will be possible to narrow these differences and explain them in greater detail.

Uses of National Register Data

The National Register of Scientific and Technical Personnel is a major source of data for studies underlying the development of national science policy. Both the Congress and the executive department agencies have sought National Register data for information on the geographic distribution of support for research and education in relation to manpower resources, the work activities of scientists, the mobility of scientific personnel, etc. Selected analyses from the National Register directed toward specific fields of science have been published in congressional reports and in professional and commercial publications. Summary findings comparing the 1964 salaries and professional characteristics of U.S. scientists in the different fields of science have been available for general use since December 1964.

Registrations, which rose from 127,000 to 224,000 in five successive registrations from 1954 to 1964, now provide information on the scientific specializations, work activities, level of education, and other characteristics of scientists over a 10-year period. Longitudinal analyses, now being planned to trace the careers of individual scientists recorded in these successive registrations, will throw further light on the geographic mobility of scientists, the regional location of advanced degree manpower, and work history patterns.

Organization of the Report

This report provides National Register data in four parts: a broad perspective in part I, with more specific, although selective, tabulations in parts II and III, and the detailed tabulations in appendix A. Administrators and science managers may be particularly interested in the presentations in part I and the summary of major characteristics in part II. Investigators seeking detailed information should look to the data in part III and the appendix tables.

The highlights of the 1964 National Register, in part I, show general characteristics of all registered scientists—such as scientific field, highest degree, age, work activity, years of professional experience, employment status, type of employer, geographic location, and salaries.

Part II summarizes in more detail the major characteristics of the 1964 scientific population. Subpopulations, such as those based on highest degree (doctor's, master's, bachelor's) and type of employer (industry, education, government, nonprofit), are shown separately.

Part III includes a series of selected statistical tables that permit comparison of relationships between two variables for a number of separate subpopulations.

In appendix A, each detailed statistical table shows relationships among three variables. The appendix tables provide detailed National Register data from which selected data were presented in earlier parts of the report.

The Subject Matter Guide (pages 4–9) shows where in this report to locate specific kinds of information on the numbers and salaries of scientists.

The questionnaire and specialties list used in 1964 are reproduced in appendix B. The subfields included in each scientific and technical field are presented in appendix C. A language family list is provided in appendix D and a list of foreign areas in appendix E.

SUBJECT MATTER GUIDE

	NUMBER OF SCIENTISTS	SALARY OF SCIENTISTS
	Page	Page
ACADEMIC RANK, *see* UNIVERSITY AND COLLEGE TEACHERS BY ACADEMIC RANK		
ACADEMIC YEAR SALARY BASE, *see* SALARY BASE FOR UNIVERSITY AND COLLEGE TEACHERS		
AGE:		
Highest degree	23, 26, 29, 57	
Median annual salary		41
Scientific field		61
Highest degree	85	
Primary work activity	108	
Type of employer	98	115
Subfield	174	
Type of employer	32, 35, 37, 39, 59	
CALENDAR YEAR SALARY BASE, *see* SALARY BASE FOR UNIVERSITY AND COLLEGE TEACHERS		
EMPLOYMENT STATUS:		
Highest degree	24, 27, 30, 58	
Scientific field	88	
Scientific field	57	
FEDERAL SUPPORT:		
Government program:		
Highest degree	47, 74	
Primary work activity	75	
Scientific field	74	
Highest degree	182	
Primary work activity	190	
Type of employer	186	
State	76	
Type of employer	75	
Scientific field	47	
Type of employer	48	
FIELD OF EMPLOYMENT:		
Scientific field	80	
FOREIGN AREA KNOWLEDGE (*see* appendix E for list of foreign areas):		
Scientific field	46, 72, 170	
FOREIGN LANGUAGE KNOWLEDGE (*see* appendix D for list of foreign languages):		
Proficiency	45, 72, 168	
Scientific field	45, 71, 164	

	NUMBER OF SCIENTISTS Page	SALARY OF SCIENTISTS Page
GENERAL CHARACTERISTICS OF U.S. SCIENTISTS	56	
GOVERNMENT PROGRAM, *see* **FEDERAL SUPPORT,** Government program		
HIGHEST DEGREE:		
Age	23, 26, 29, 57	
Bachelor's degree holders	29–32	
Doctorate holders	23–25	
Employment status	24, 27, 30, 58	
Federal Support and Government program	47, 74	
Major subject and scientific field	80	
Master's degree holders	26–28	
Primary work activity	25, 28, 31, 58	
Secondary work activity at universities and colleges	200	
Scientific field	23, 26, 29, 57	41, 61
Age	85	
Employment status	88	
Government program	182	
Major subject	80	
Primary work activity	93	
Students, part-time	196	
Type of employer	91	113
University and college teachers by academic rank	106	
Women	49, 78	
Years of professional experience	96	
Standard Metropolitan Statistical Area	68, 138	155
State	64, 125	129
Students, part-time, and scientific field	196	
Subfield	172	
Type of employer	24, 27, 30, 58	63
Universities and colleges, primary work activity, and secondary work activity	200	
University and college teachers by academic rank	34	
Women and scientific field	49, 78	
Years of professional experience	25, 28, 31, 59	
MAJOR SUBJECT OF HIGHEST DEGREE:		
Scientific field	80	
MEDIAN ANNUAL SALARY, *see* pages listed in salary column		
PRIMARY WORK ACTIVITY (*see also* **SECONDARY WORK ACTIVITY**):		
Age and scientific field	108	
Federal support and Government program	75	
Highest degree	25, 28, 31, 58	
Secondary work activity at universities and colleges	200	

	NUMBER OF SCIENTISTS	SALARY OF SCIENTISTS
	Page	Page
PRIMARY WORK ACTIVITY—Continued		
Median annual salary		42
Scientific field		62
Age	108	
Government program	190	
Highest degree	93	
Secondary work activity at universities and colleges	197	
Students, part-time	196	
Type of employer	101	118
Women	78	
Years of professional experience	111	
Secondary work activity and highest degree at universities and colleges	200	
Secondary work activity and scientific field at universities and colleges	197	
Standard Metropolitan Statistical Area	69, 145	161
State	65, 127	131
Students, part-time, and scientific field	196	
Subfield	178	
Type of employer	33, 36, 38, 40, 60	63
Women	50	
Years of professional experience and scientific field	111	
PROFESSIONAL IDENTIFICATION:		
Scientific field	79	
SALARY BASE FOR UNIVERSITY AND COLLEGE TEACHERS:		
Scientific field and academic rank		123
SALARY DISTRIBUTION:		
Scientific field		61
SCIENTIFIC FIELD:		
Age		61
Highest degree	85	
Primary work activity	108	
Type of employer	98	
Employment status	57	
Highest degree	88	
Federal support	47	
Government program	74	
Highest degree	182	
Primary work activity	190	
Type of employer	186	
Field of employment	80	
Foreign area knowledge	46, 72, 170	
Foreign language knowledge	45, 71, 164	
Government program	74	
Highest degree	182	

	NUMBER OF SCIENTISTS	SALARY OF SCIENTISTS
	Page	Page
SCIENTIFIC FIELD—Continued		
Government program—Continued		
Primary work activity	190	
Type of employer	186	
Highest degree, *see* HIGHEST DEGREE, scientific field		
Major subject of highest degree	80	
Primary work activity, *see* PRIMARY WORK ACTIVITY, scientific field		
Professional identification	79	
Salary base and academic rank for university and college teachers		123
Salary distribution		61
Secondary work activity and primary work activity at universities and colleges	197	
Sex	77	
Standard Metropolitan Statistical Area	67, 132	148
State	64, 124	128
University and college teachers	202	
Students, part-time:		
Highest degree	196	
Primary work activity	196	
Type of employer	196	
Type of employer, *see* TYPE OF EMPLOYER, scientific field		
Universities and colleges, primary work activity and secondary work activity	197	
University and college teachers:		
Highest degree and academic rank	106	
Salary base and academic rank		123
State	202	51
Women	49	
Highest degree	49, 78	
Primary work activity	78	
Type of employer	78	
Years of professional experience	79	
Years of professional experience		62
Highest degree	96	
Primary work activity	111	121
Type of employer	104	
SECONDARY WORK ACTIVITY (*see also* PRIMARY WORK ACTIVITY):		
Highest degree and primary work activity at universities and colleges	200	
Scientific field and primary work activity at universities and colleges	197	
STANDARD METROPOLITAN STATISTICAL AREA:		
Highest degree	68, 138	155

	NUMBER OF SCIENTISTS	SALARY OF SCIENTISTS
	Page	Page
Standard Metropolitan Statistical Area—Continued		
Median annual salary	44, 70	44, 70
Primary work activity	69, 145	161
Scientific field	67, 132	148
Type of employer	68, 141	158
State:		
Government program	76	
Highest degree	64, 125	129
Median annual salary	44, 66	44, 66
Primary work activity	65, 127	131
Scientific field	64, 124	128
University and college teachers	202	
Type of employer	65, 126	130
University and college teachers by academic rank	203	
Students, Part-time:		
Highest degree and scientific field	196	
Primary work activity and scientific field	196	
Type of employer and scientific field	196	
Subfield (*see* appendix C for list of subfields):		
Age	174	
Highest degree	172	
Median annual salary		73
Primary work activity	178	
Type of employer	176	
Years of professional experience	180	
Type of Employer:		
Age	59	
Educational institutions	32–34	
Federal Government	37, 38	
Federal support	48	
Government program	75	
Highest degree	24, 27, 30, 58	63
Industry and business	35, 36	
Median annual salary		42
Nonprofit organizations	39, 40	
Primary work activity	60	63
Scientific field	32, 35, 37, 39, 59	62
Age	98	115
Government program	186	
Highest degree	91	113
Primary work activity	101	118
Students, part-time	196	
Women	78	
Years of professional experience	104	121
Standard Metropolitan Statistical Area	68, 141	158
State	65, 126	130

	NUMBER OF SCIENTISTS Page	SALARY OF SCIENTISTS Page
TYPE OF EMPLOYER—Continued		
Subfield	176	
Women	50	
Years of professional experience	33, 36, 38, 40, 60	63
UNIVERSITY AND COLLEGE TEACHERS:		
Academic rank:		
Highest degree	34	
Scientific field	106	
Scientific field and salary base		123
State	203	
Scientific field and State	202	
WOMEN SCIENTISTS:		
Highest degree and scientific field	49, 78	
Primary work activity	50	51
Scientific field	49, 77	
Primary work activity	78	
Type of employer	78	
Years of professional experience	79	
Type of employer	50	
Years of professional experience	51	
WORK ACTIVITY, *see* PRIMARY WORK ACTIVITY and SECONDARY WORK ACTIVITY		
YEARS OF PROFESSIONAL EXPERIENCE:		
Highest degree	25, 28, 31, 59	
Median annual salary		43
Scientific field		62
Highest degree	96	
Primary work activity	111	
Type of employer	104	121
Women	79	
Subfield	180	
Type of employer	33, 36, 38, 40, 60	63
Women	51	

PART I

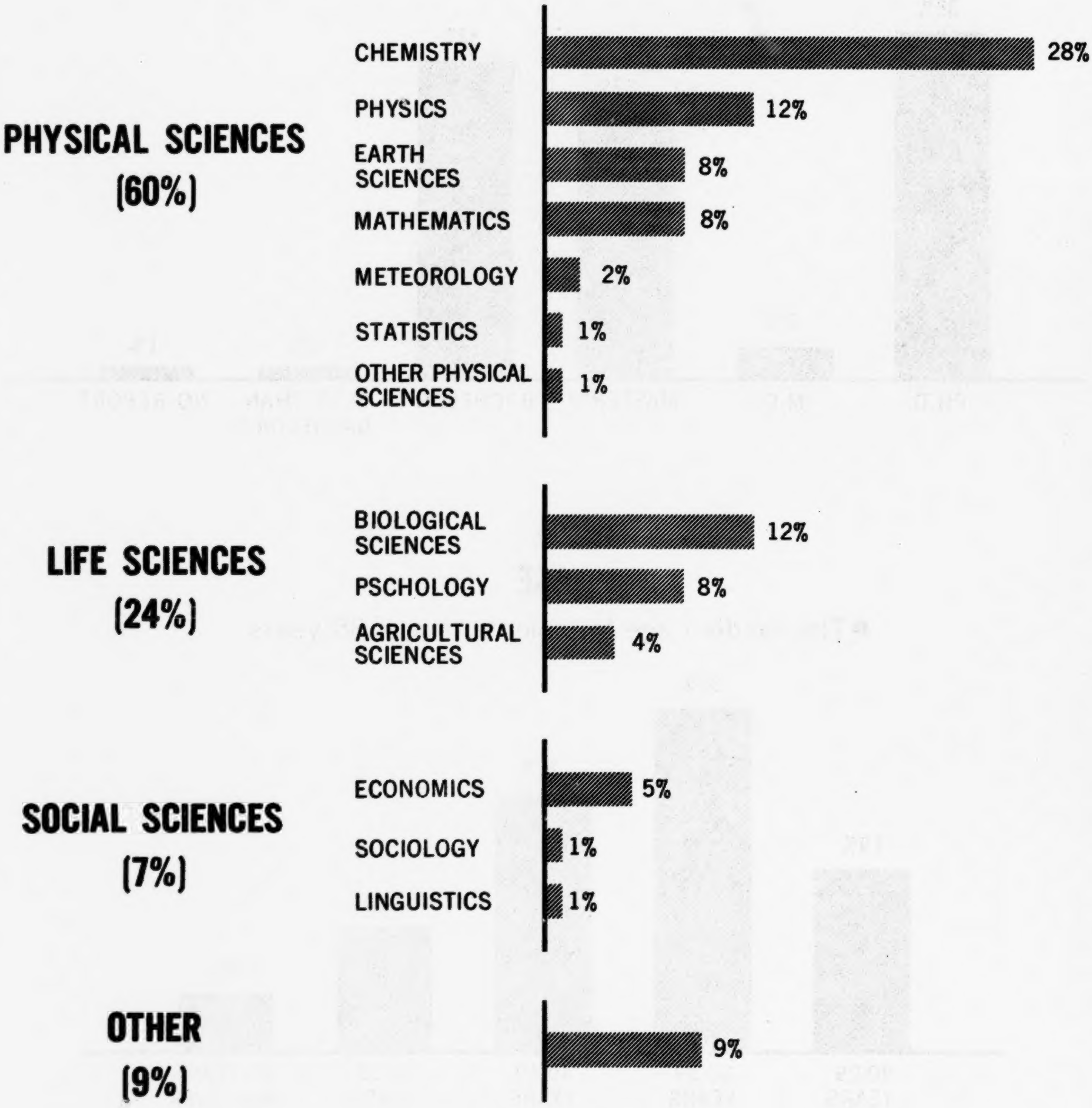
Graphic Highlights of 1964 National Register

- **Percent details shown in these charts may not add to totals because of rounding.**
- **Numerical basis for percentages was the total 223,854 scientists in the National Register of Scientific and Technical Personnel, 1964.**

GENERAL CHARACTERISTICS OF SCIENTISTS

SCIENTIFIC FIELD

- Almost two-thirds of the scientists were in the physical sciences.

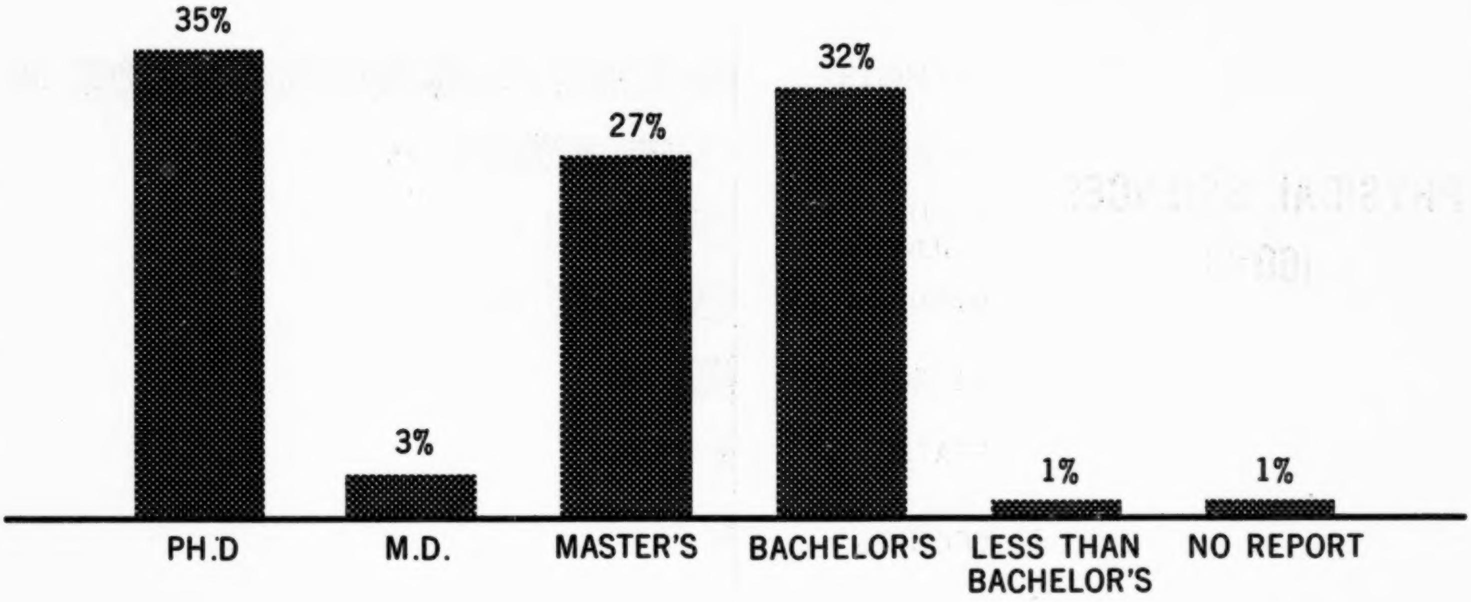


SOURCE: National Register of Scientific and Technical Personnel, 1964

GENERAL CHARACTERISTICS OF SCIENTISTS

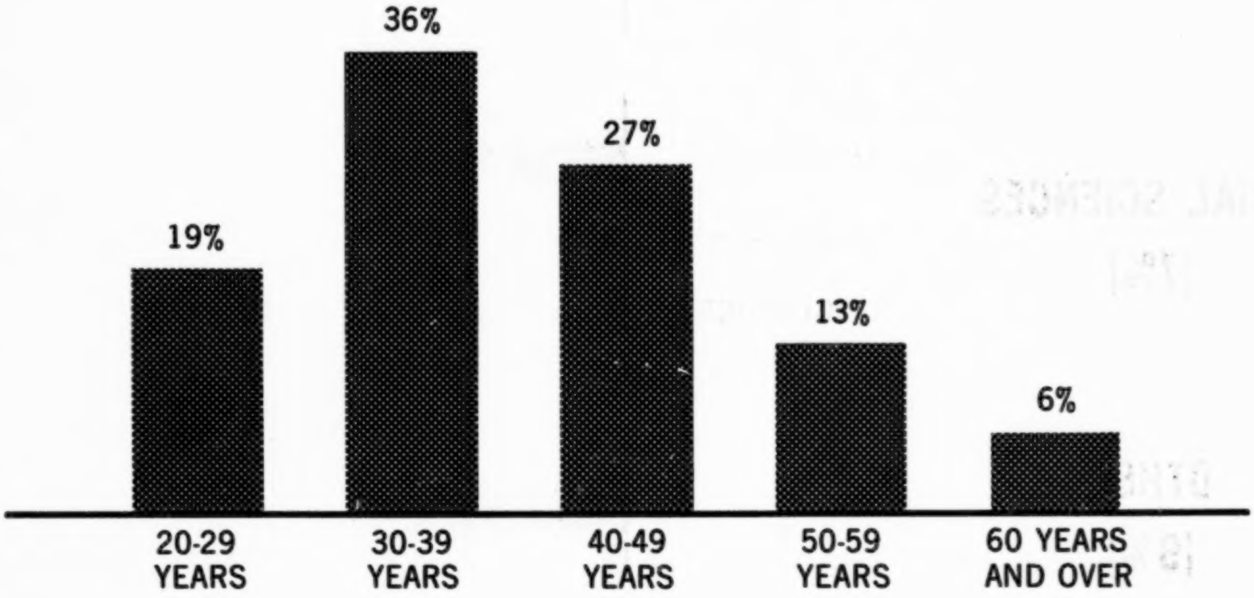
HIGHEST DEGREE

- More than one-third of the scientists had a Ph.D.



AGE

- The median age for scientists was 38 years.

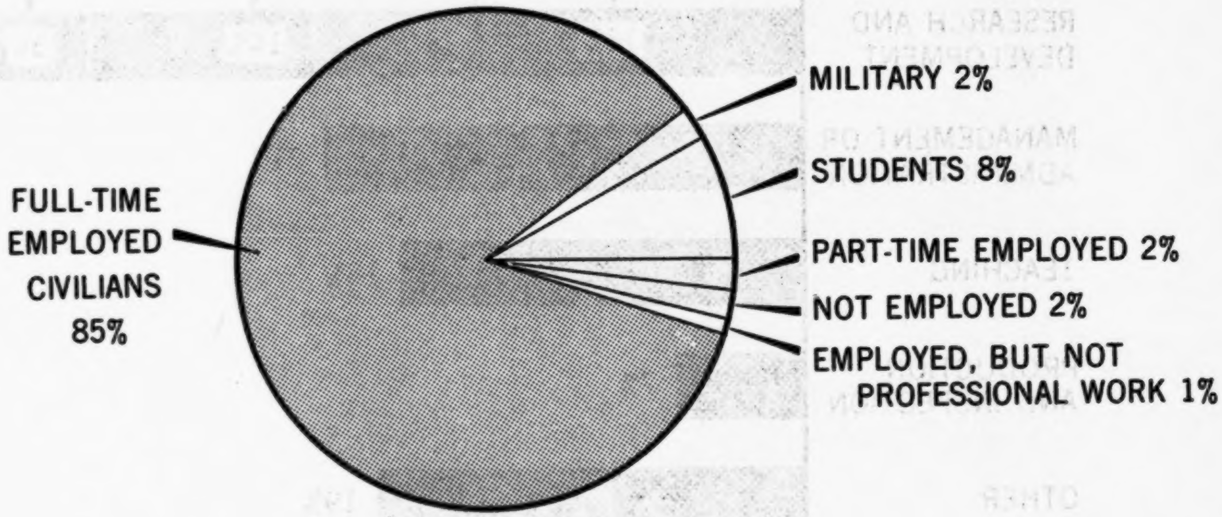


SOURCE: National Register of Scientific and Technical Personnel, 1964

GENERAL CHARACTERISTICS OF SCIENTISTS

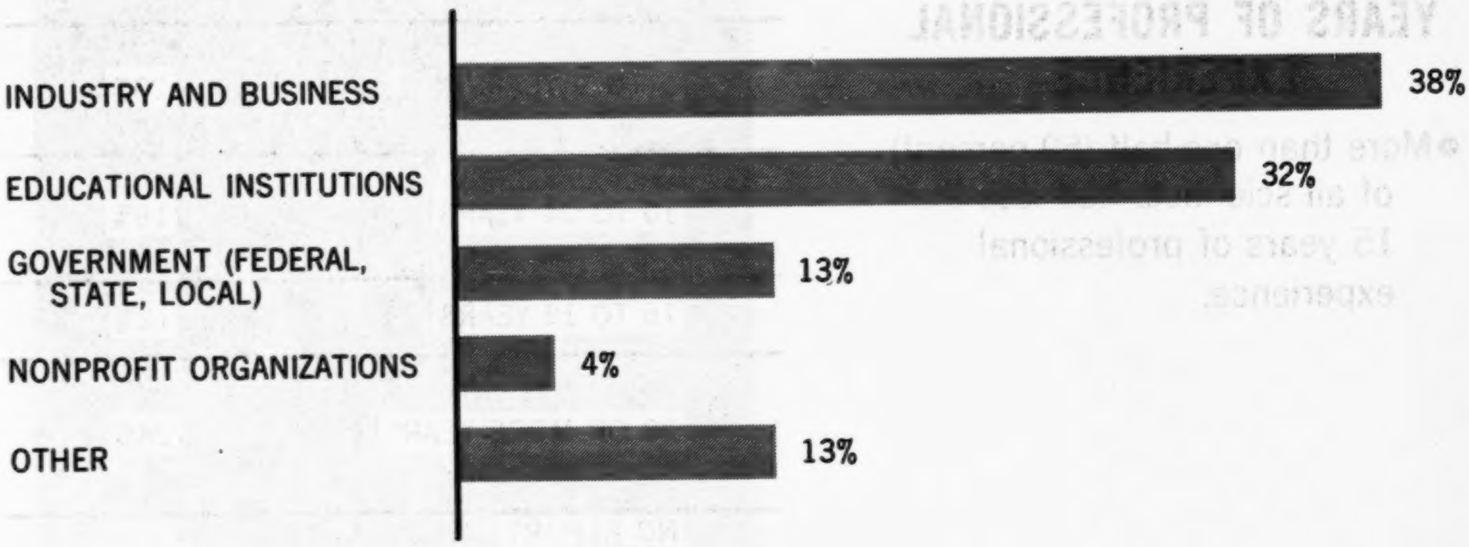
EMPLOYMENT STATUS

- Eighty-five percent of the scientists were in full-time civilian employment.



TYPE OF EMPLOYER

- Educational institutions and industry and business employed 70 percent of the scientists.

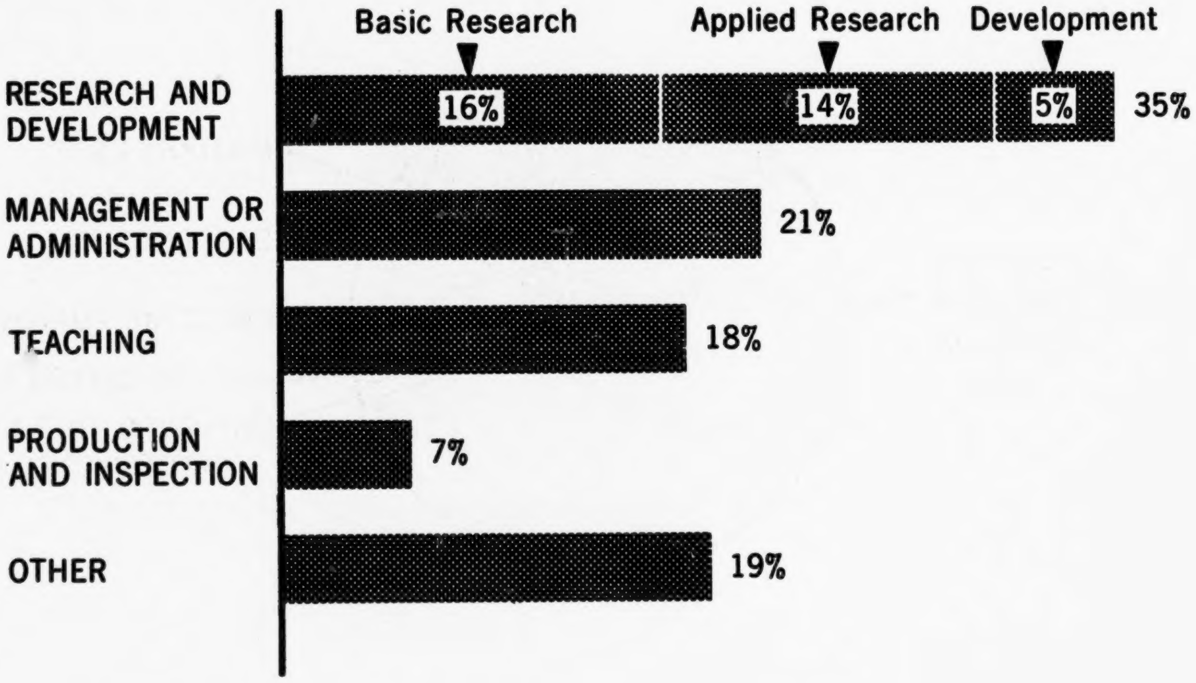


SOURCE: National Register of Scientific and Technical Personnel, 1964

GENERAL CHARACTERISTICS OF SCIENTISTS

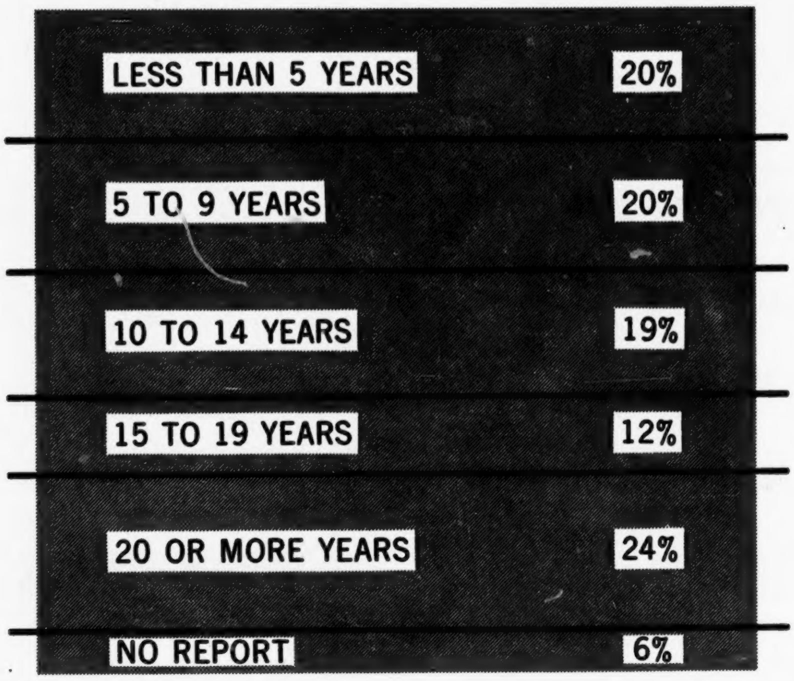
WORK ACTIVITY

- Thirty-five percent of the scientists were in research and development.



YEARS OF PROFESSIONAL EXPERIENCE

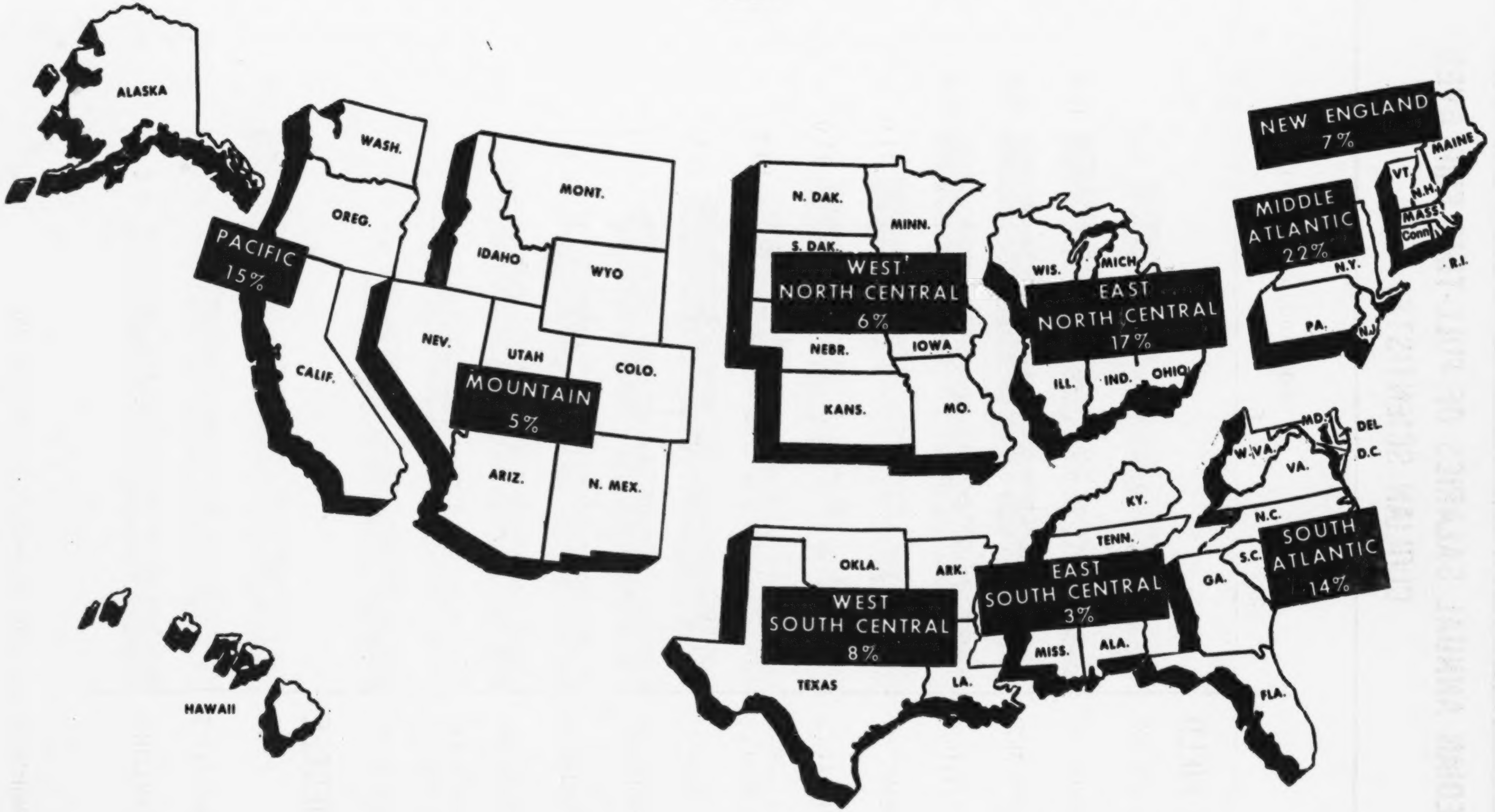
- More than one-half (59 percent) of all scientists had less than 15 years of professional experience.



SOURCE: National Register of Scientific and Technical Personnel, 1964

DISTRIBUTION OF SCIENTISTS BY U.S. GEOGRAPHIC DIVISION

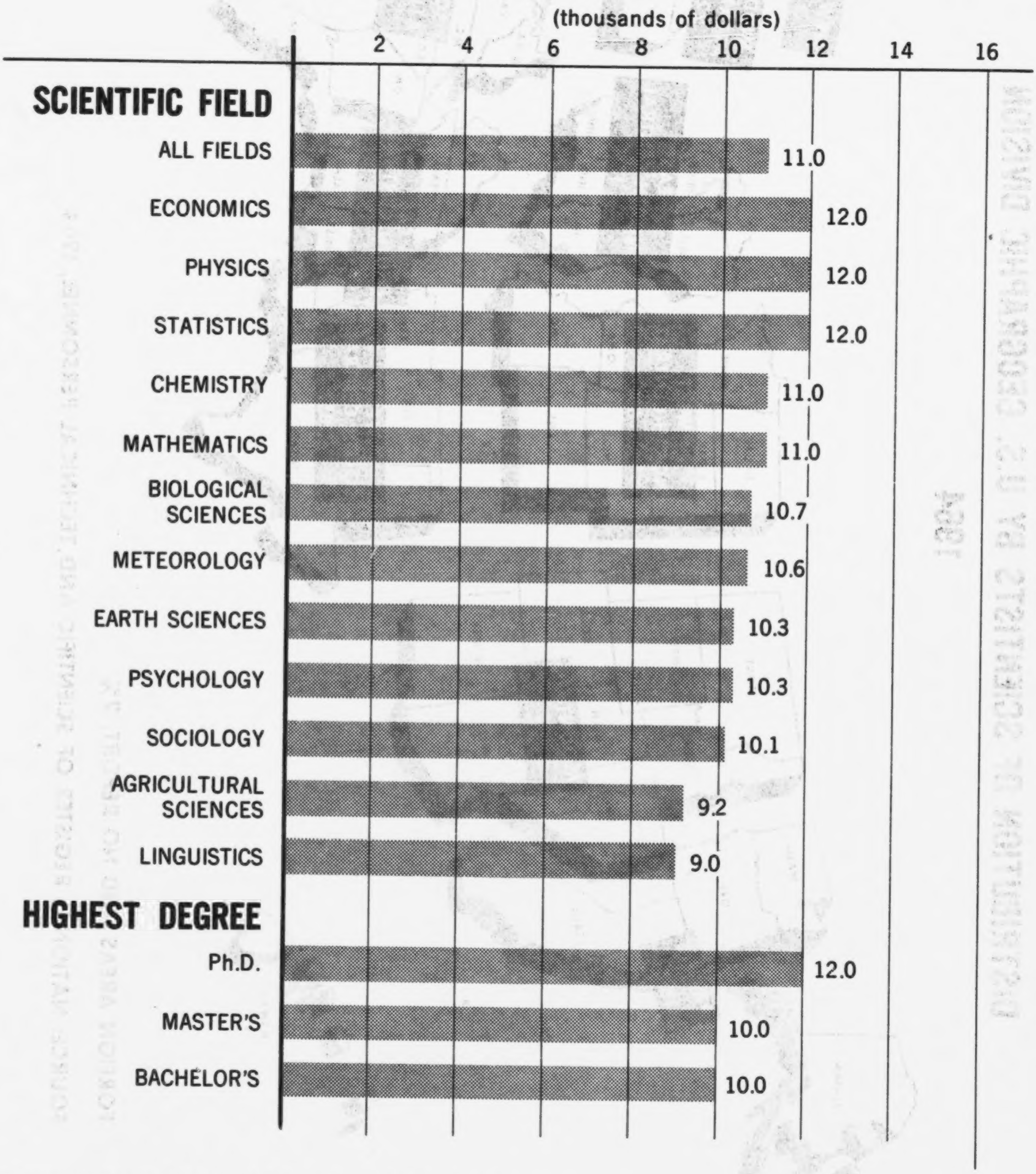
1964


ALASKA
WASH.
OREG.
CALIF.
PACIFIC 15%
MONT.
IDAHO
WYO
NEV.
UTAH
COLO.
ARIZ.
N. MEX.
MOUNTAIN 5%
N. DAK.
S. DAK.
NEBR.
KANS.
MINN.
IOWA
MO.
WEST NORTH CENTRAL 6%
WIS.
MICH.
ILL.
IND.
OHIO
EAST NORTH CENTRAL 17%
NEW ENGLAND 7%
MAINE
VT.
N.H.
MASS.
Conn.
R.I.
MIDDLE ATLANTIC 22%
N.Y.
PA.
N.J.
MD.
DEL.
D.C.
W. VA.
VA.
N.C.
S.C.
GA.
FLA.
SOUTH ATLANTIC 14%
KY.
TENN.
MISS.
ALA.
EAST SOUTH CENTRAL 3%
OKLA.
ARK.
TEXAS
LA.
WEST SOUTH CENTRAL 8%
HAWAII

FOREIGN AREAS AND NO REPORT, 2%

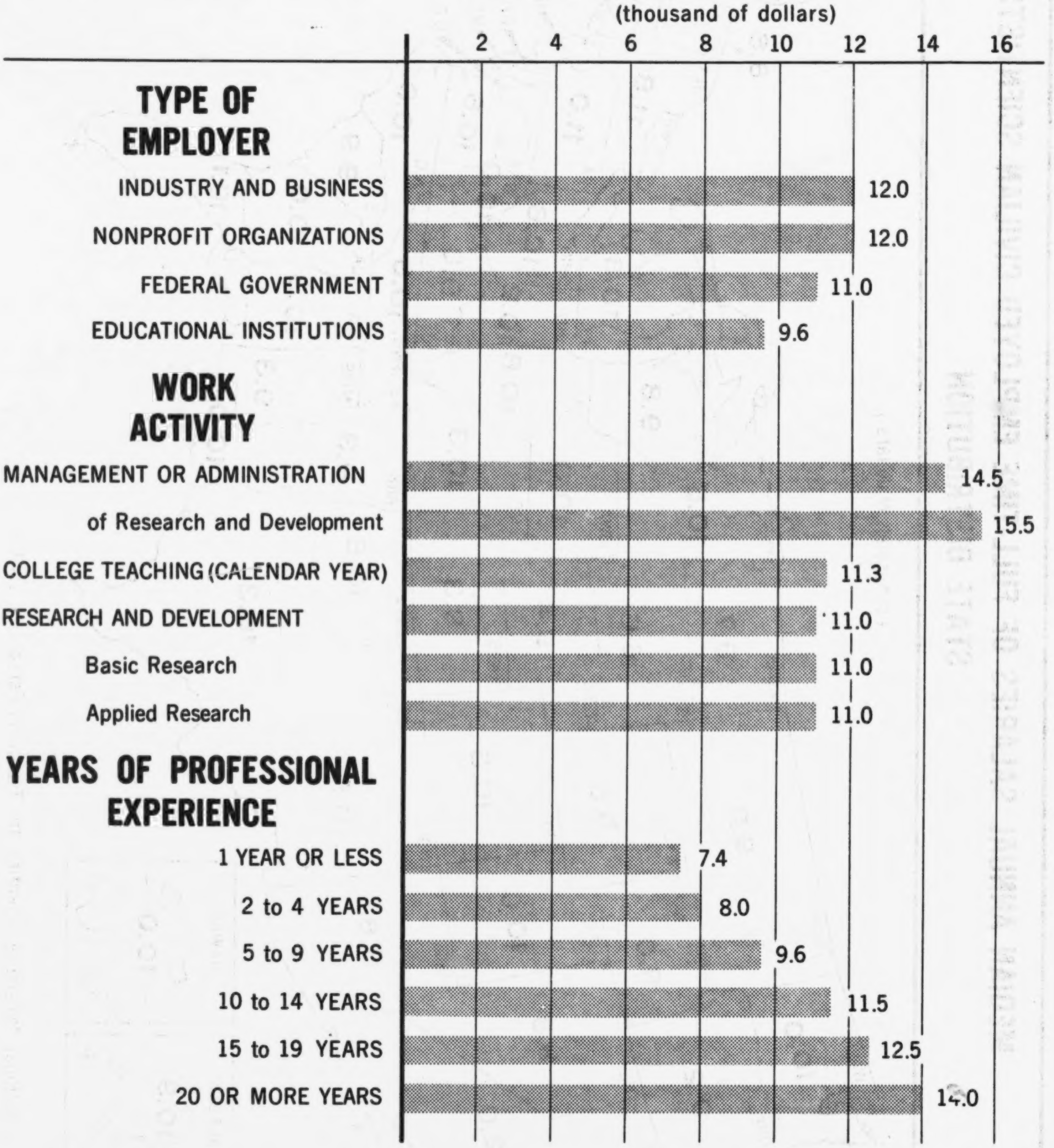
SOURCE: NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964

MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS



SOURCE: National Register of Scienfific and Technical Personnel, 1964

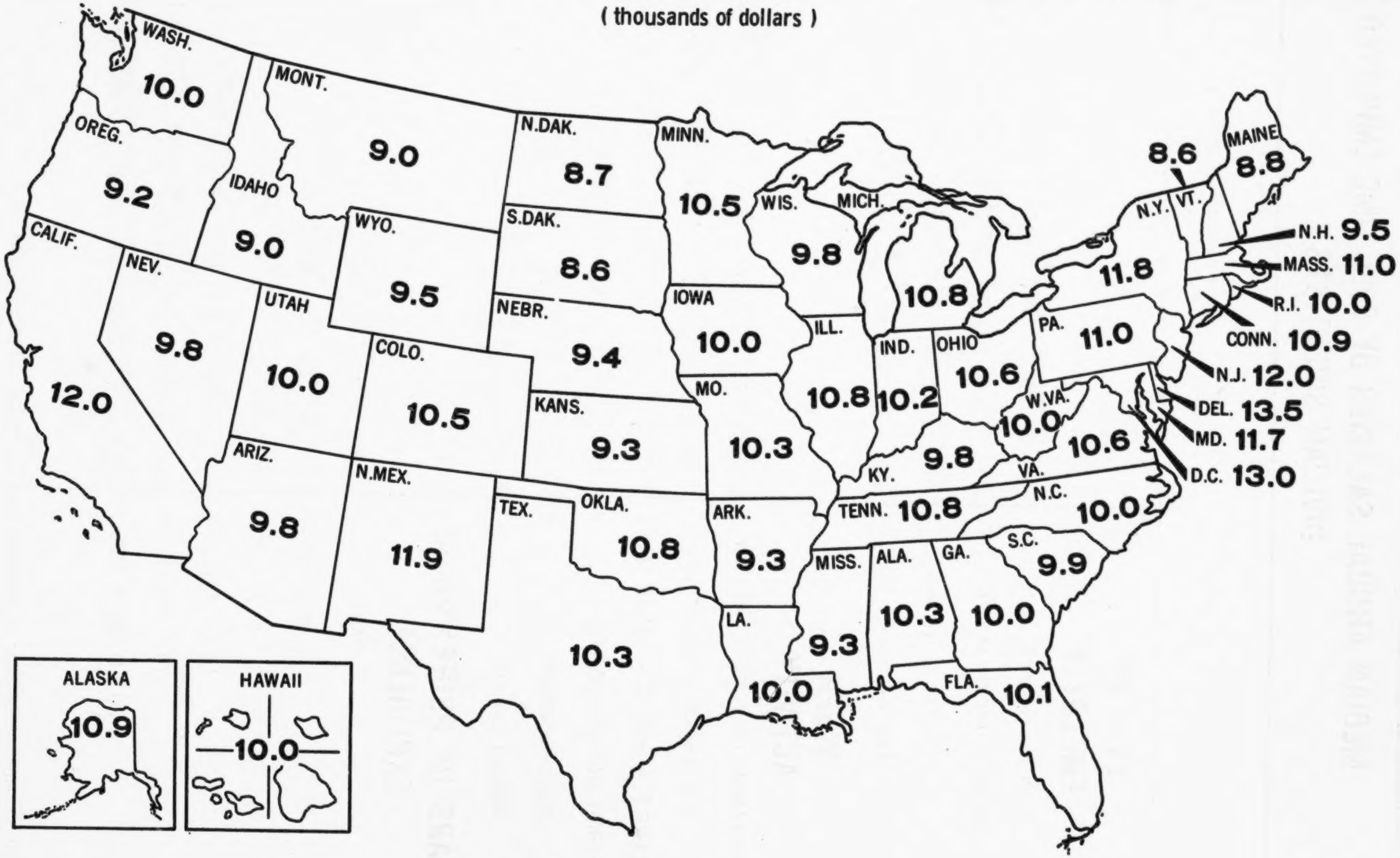
MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS



SOURCE: National Register of Scientific and Technical Personnel, 1964

MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS
STATE DISTRIBUTION

(thousands of dollars)


WASH. 10.0
OREG. 9.2
CALIF. 12.0
NEV. 9.8
IDAHO 9.0
MONT. 9.0
WYO. 9.5
UTAH 10.0
COLO. 10.5
ARIZ. 9.8
N.MEX. 11.9
N.DAK. 8.7
S.DAK. 8.6
NEBR. 9.4
KANS. 9.3
OKLA. 10.8
TEX. 10.3
MINN. 10.5
IOWA 10.0
MO. 10.3
ARK. 9.3
LA. 10.0
WIS. 9.8
ILL. 10.8
MICH. 10.8
IND. 10.2
OHIO 10.6
KY. 9.8
TENN. 10.8
MISS. 9.3
ALA. 10.3
GA. 10.0
FLA. 10.1
S.C. 9.9
N.C. 10.0
VA. 10.6
W.VA. 10.0
PA. 11.0
N.Y. 11.8
VT. 8.6
MAINE 8.8
N.H. 9.5
MASS. 11.0
R.I. 10.0
CONN. 10.9
N.J. 12.0
DEL. 13.5
MD. 11.7
D.C. 13.0
ALASKA 10.9
HAWAII 10.0

SOURCE: National Register of Scientific and Technical Personnel, 1964

PART II

Summaries of Major Characteristics

In all tables in this section, percent detail may not add to totals because of rounding.

SCIENTISTS WITH PH.D. DEGREE

Scientific Field ● Doctorates were held by 81 percent of scientists in sociology and by 65 percent of those in psychology.

Field	Total registrants	Ph.D. degree holder		
		Number	Percent of total	Percent
All fields	223,854	79,372	35	100
Chemistry	63,053	21,789	35	27
Earth sciences	17,907	3,578	20	5
Meteorology	5,510	479	9	1
Physics	26,698	10,286	39	13
Mathematics	17,411	4,603	26	6
Agricultural sciences	9,526	2,367	25	3
Biological sciences	27,135	13,355	49	17
Psychology	16,804	10,843	65	14
Statistics	2,843	804	28	1
Economics	12,143	5,091	42	6
Sociology	2,703	2,179	81	3
Linguistics	1,351	729	54	1
Other fields	20,770	3,269	16	4

Age ● Of scientists holding the Ph.D. degree, 25 percent were less than 35 years old.

The percentage of scientists with the doctorate increased with age, reaching 56 percent of those age 70 and over.

Age	Total registrants	Ph.D. degree holder		
		Number	Percent of total	Percent
All ages	223,854	79,372	35	100
20 - 24	8,247	47	1	-
25 - 29	34,102	5,704	17	7
30 - 34	39,896	14,142	35	18
35 - 39	40,148	16,167	40	20
40 - 44	35,831	14,796	41	19
45 - 49	24,726	10,220	41	13
50 - 54	16,921	6,942	41	9
55 - 59	11,308	4,998	44	6
60 - 64	6,966	3,392	49	4
65 - 69	3,428	1,759	51	2
70 and over	1,992	1,111	56	1
No report	289	94	33	-

Source -- National Register of Scientific and Technical Personnel, 1964.

SCIENTISTS WITH PH.D. DEGREE

Employment Status

●Almost all doctorate holders (94 percent) were in full-time civilian employment.

Employment status	Ph.D. degree holder	
	Number	Percent
All registrants	79,372	100
Full-time employed	75,275	95
Civilian	74,674	94
Military	601	1
Part-time employed	1,352	2
Students	763	1
Part-time employed	513	1
Not employed	250	-
Employed, but not professional work	334	-
Not employed [a]	1,531	2
No report	117	-

Type of Employer

●Ph. D's constitute 54 percent of the scientists employed by educational institutions, and 47 percent of those employed by nonprofit organizations.

The employers of over one-half (53 percent) of the doctorate holders were educational institutions.

Type of employer	Total registrants	Ph.D. degree holder		
		Number	Percent of Total	Percent
All registrants [b]	223,854	79,372	35	100
Educational institutions [c]	77,727	42,112	54	53
Federal Government	23,405	6,717	29	8
Other Government [d]	7,472	1,969	26	2
Military	5,522	649	12	1
Nonprofit organizations	8,722	4,056	47	5
Industry and business	84,421	19,979	24	25
Self-employed	4,277	1,344	31	2
Other	1,434	516	36	1
No report	1,257	249	20	-

---

[a] Includes retired persons, housewives, etc.

[b] There were 1,781 doctorates not employed, including retired persons, housewives, students, etc., constituting 2 percent of all doctorates and 19 percent of all registrants not employed.

[c] Includes universities, colleges, and secondary school systems.

[d] Includes State, local, regional, and international agencies.

Source -- National Register of Scientific and Technical Personnel, 1964.

SCIENTISTS WITH PH.D. DEGREE

Primary Work Activity

●Of doctorate holders, 39 percent were engaged primarily in basic or applied research, and 29 percent reported teaching as their primary work.

Primary work activity	Ph.D. degree holder	
	Number	Percent
All activities[a]	79,372	100
Research and development	31,674	40
Basic research	(20,343)	(26)
Applied research	(10,362)	(13)
Management or administration	15,244	19
Management or administration of research and development	(10,732)	(14)
Teaching	22,673	29
Production and inspection	723	1
Other	5,430	7
No report	1,847	2

Years of Professional Experience

●Of the Ph. D.'s, 15 percent had less than 5 years of professional experience.

Years of professional experience	Ph.D. degree holder	
	Number	Percent
All years	79,372	100
1 year	2,191	3
2 to 4 years	9,447	12
5 to 9 years	15,610	20
10 to 14 years	16,769	21
15 to 19 years	9,837	12
20 or more	22,446	28
No report	3,072	4

---

[a] There were 1,781 (2 percent of doctorates) not employed, including retired persons, housewives, etc.

Source -- National Register of Scientific and Technical Personnel, 1964.

SCIENTISTS WITH MASTER'S AS HIGHEST DEGREE

Scientific Field ●Master's degrees were held by 43 percent of the registrants in mathematics and by 40 percent of those in statistics.

Field	Total registrants	Master's degree holder		
		Number	Percent of total	Percent
All fields	223,854	61,222	27	100
Chemistry	63,053	12,229	19	20
Earth sciences	17,907	5,829	33	10
Meteorology	5,510	1,137	21	2
Physics	26,698	8,352	31	14
Mathematics	17,411	7,464	43	12
Agricultural sciences	9,526	2,676	28	4
Biological sciences	27,135	5,028	19	8
Psychology	16,804	5,464	33	9
Statistics	2,843	1,133	40	2
Economics	12,143	4,204	35	7
Sociology	2,703	434	16	1
Linquistics	1,351	407	30	1
Other fields	20,770	6,865	33	11

Age ●Of scientists holding the master's degree, 23 percent were less than 30 years old.

Age	Total registrants	Master's degree holder		
		Number	Percent of total	Percent
All ages	223,854	61,222	27	100
20 - 24	8,247	1,611	20	3
25 - 29	34,102	12,484	37	20
30 - 34	39,896	12,324	31	20
35 - 39	40,148	10,769	27	18
40 - 44	35,831	8,924	25	15
45 - 49	24,726	5,704	23	9
50 - 54	16,921	4,059	24	7
55 - 59	11,308	2,704	24	4
60 - 64	6,966	1,507	22	2
65 - 69	3,428	715	21	1
70 and over	1,992	332	17	1
No report	289	89	31	-

Source -- National Register of Scientific and Technical Personnel, 1964.

SCIENTISTS WITH MASTER'S AS HIGHEST DEGREE

Employment Status

●More than three-fourths (78 percent) of the scientists holding a master's degree were in full-time civilian employment.

Employment status	Master's degree holder	
	Number	Percent
All registrants	61,222	100
Full-time employed	48,858	80
Civilian	(47,642)	(78)
Military	(1,216)	(2)
Part-time employed	1,171	2
Students	8,952	15
Part-time employed	(6,752)	(11)
Not employed	(2,200)	(4)
Employed but not professional work	761	1
Not employed [a]	1,355	2
No report	125	-

Type of Employer

●About one-fourth of the scientists employed by each type of employer held the master's degree - except employees of other government (36 percent).

Among holders of the master's degree, almost identical percentages worked for educational institutions (36 percent) and for industry and business (35 percent).

Type of employer	Total registrants	Master's degree holder		
		Number	Percent of total	Percent
All registrants [b]	223,854	61,222	27	100
Educational institutions [c]	77,727	22,044	28	36
Federal Government	23,405	6,085	26	10
Other government [d]	7,472	2,637	36	4
Military	5,522	1,428	26	2
Nonprofit organizations	8,722	2,195	25	4
Industry and business	84,421	21,489	25	35
Self-employed	4,277	880	21	1
Other	1,434	458	32	1
No report	1,257	451	36	1

[a] Includes retired persons, housewives, etc.

[b] There were 3,555 master's degree holders not employed, including retired persons, housewives, students, etc., constituting 6 percent of all master's degree holders and 37 percent of all registrants not employed.

[c] Includes universities, colleges, and secondary school systems.

[d] Includes State, local, regional, and international agencies.

Source -- National Register of Scientific and Technical Personnel, 1964.

SCIENTISTS WITH MASTER'S AS HIGHEST DEGREE

Primary Work Activity ●Of master's degree holders, 28 percent worked primarily in basic or applied research, and 21 percent reported teaching as their primary work.

Primary work activity	Master's degree holder	
	Number	Percent
All activities [a]	61,222	100
Research and development	20,380	33
Basic research	(7,282)	(12)
Applied research	(9,768)	(16)
Management or administration	11,237	18
Management or administration of research and development	(5,788)	(9)
Teaching	12,875	21
Production and inspection	3,494	6
Other	8,030	13
No report	1,651	3

Years of Professional Experience ●Of master's degree holders, 23 percent had less than 5 years of professional experience.

Years of professional experience	Master's degree holder	
	Number	Percent
All years	61,222	100
1 year	2,258	4
2 to 4 years	11,328	19
5 to 9 years	13,751	22
10 to 14 years	11,670	19
15 to 19 years	6,522	11
20 or more	11,846	19
No report	3,847	6

[a] There were 3,555 (6 percent of master's degree holders) not employed, including retired persons, housewives, etc.

Source -- National Register of Scientific and Technical Personnel, 1964.

SCIENTISTS WITH BACHELOR'S AS HIGHEST DEGREE

Scientific Field ●Bachelor's degrees were held by 46 percent of the scientists in agricultural sciences and meteorology, 45 percent of those in earth sciences, and 43 percent of those in chemistry.

Field	Total registrants	Bachelor's degree holder		
		Number	Percent of total	Percent
All fields	223,854	72,364	32	100
Chemistry	63,053	27,377	43	38
Earth sciences	17,907	8,101	45	11
Meteorology	5,510	2,524	46	3
Physics	26,698	7,673	29	11
Mathematics	17,411	4,917	28	7
Agricultural sciences	9,526	4,362	46	6
Biological sciences	27,135	3,172	12	4
Psychology	16,804	417	2	1
Statistics	2,843	810	28	1
Economics	12,143	2,613	22	4
Sociology	2,703	65	2	-
Linguistics	1,351	162	12	-
Other fields	20,770	10,171	49	14

Age ●Of scientists holding the bachelor's degree, 30 percent were less than 30 years old.

Age	Total registrants	Bachelor's degree holder		
		Number	Percent of total	Percent
All ages	223,854	72,364	32	100
20 - 24	8,247	6,491	79	9
25 - 29	34,102	15,356	45	21
30 - 34	39,896	11,858	30	16
35 - 39	40,148	11,193	28	15
40 - 44	35,831	10,089	28	14
45 - 49	24,726	7,226	29	10
50 - 54	16,921	4,665	28	6
55 - 59	11,308	2,729	24	4
60 - 64	6,966	1,521	22	2
65 - 69	3,428	701	20	1
70 and over	1,992	434	22	1
No report	289	101	35	-

Source -- National Register of Scientific and Technical Personnel, 1964.

SCIENTISTS WITH BACHELOR'S AS HIGHEST DEGREE

Employment Status

● Of scientists holding the bachelor's degree, 81 percent were in full-time civilian employment.

Employment status	Bachelor's degree holder	
	Number	Percent
All registrants	72,364	100
Full-time employed	59,838	83
Civilian	(58,282)	(81)
Military	(1,556)	(2)
Part-time employed	791	1
Students	8,051	11
Part-time employed	(5,963)	(8)
Not employed	(2,088)	(3)
Employed but not professional work	1,695	2
Not employed [a]	1,898	3
No report	91	1

Type of Employer

● Almost one-half (48 percent) of the scientists employed by industry and business and 41 percent in Federal Government held the bachelor's degree.

Over half (56 percent) of holders of the bachelor's degree were employed by industry and business.

Type of employer	Total registrants	Bachelor's degree holder		
		Number	Percent of total	Percent
All registrants [b]	223,854	72,364	32	100
Educational institutions [c]	77,727	10,212	13	14
Federal Government	23,405	9,521	41	13
Other government [d]	7,472	2,484	33	3
Military	5,522	2,209	40	3
Nonprofit organizations	8,722	1,449	17	2
Industry and business	84,421	40,233	48	56
Self-employed	4,277	1,441	34	2
Other	1,434	366	26	1
No report	1,257	463	37	1

---

[a] Includes retired persons, housewives, etc.

[b] There were 3,986 bachelor's degree holders not employed, including retired persons, housewives, students, etc., constituting 6 percent of all bachelor's degree holders and 41 percent of all registrants not employed.

[c] Includes universities, colleges, and secondary school systems.

[d] Includes State, local, regional, and international agencies.

Source -- National Register of Scientific and Technical Personnel, 1964.

SCIENTISTS WITH BACHELOR'S AS HIGHEST DEGREE

Primary Work Activity

● Of the bachelor's degree holders, 24 percent worked primarily in management or administration, 16 percent in production and inspection, and 12 percent in applied research.

Primary work activity	Bachelor's degree holder	
	Number	Percent
All activities[a]	72,364	100
Research and development	22,002	30
Basic research	(6,434)	(9)
Applied research	(8,563)	(12)
Management or administration	17,565	24
Management or administration of research and development	(7,002)	(10)
Teaching	4,604	6
Production and inspection	11,731	16
Other	10,315	14
No report	2,161	3

Years of Professional Experience

● Almost one-fourth (23 percent) of the bachelor's degree holders had less than 5 years of professional experience.

Years of professional experience	Bachelor's degree holder	
	Number	Percent
All years	72,364	100
1 year	3,737	5
2 to 4 years	13,315	18
5 to 9 years	14,200	20
10 to 14 years	12,305	17
15 to 19 years	8,099	11
20 or more	15,481	21
No report	5,227	7

[a] There were 3,986 (6 percent of bachelor's degree holders) not employed, including retired persons, housewives, etc.

Source -- National Register of Scientific and Technical Personnel, 1964.

SCIENTISTS EMPLOYED IN EDUCATIONAL INSTITUTIONS [a]

Scientific Field ● Almost one-half (53 percent) of scientists employed in educational institutions were in the biological sciences, in chemistry, and in physics.

Field	Total registrants	Registrants in educational institutions		
		Number	Percent of total	Percent
All fields	223,854	77,727	35	100
Chemistry	63,053	13,616	22	18
Earth sciences	17,907	4,023	22	5
Meteorology	5,510	527	10	1
Physics	26,698	11,611	43	15
Mathematics	17,411	7,206	41	9
Agricultural sciences	9,526	2,833	30	4
Biological sciences	27,135	15,872	58	20
Psychology	16,804	8,162	49	11
Statistics	2,843	778	27	1
Economics	12,143	5,061	42	7
Sociology	2,703	2,080	77	3
Linguistics	1,351	930	69	1
Other fields	20,770	5,028	24	6

Age ● About one-fourth (22 percent) of the scientists employed in educational institutions were less than 30 years old.

Age	Registrants in educational institutions	
	Number	Percent
All ages	77,727	100
20 - 24	3,844	5
25 - 29	13,043	17
30 - 34	14,159	18
35 - 39	13,017	17
40 - 44	11,229	14
45 - 49	7,796	10
50 - 54	5,626	7
55 - 59	4,236	5
60 - 64	2,917	4
65 - 69	1,367	2
70 and over	369	-
No report	124	-

[a] Includes universities, colleges, and secondary school systems.

Source -- National Register of Scientific and Technical Personnel, 1964.

SCIENTISTS EMPLOYED IN EDUCATIONAL INSTITUTIONS [a]

Primary Work Activity ● One-half (51 percent) of the scientists in educational institutions were primarily engaged in teaching; 26 percent were primarily in basic research.

Primary work activity	Registrants in educational institutions	
	Number	Percent
All activities	77,727	100
Research and development	26,392	34
Basic research	(19,894)	(26)
Applied research	(6,047)	(8)
Management or administration	5,778	7
Management or administration of research and development	(2,793)	(4)
Teaching	39,926	51
Production and inspection	249	-
Other	3,325	4
No report	2,057	3

Years of Professional Experience ● Of scientists employed in educational institutions, 23 percent had less than 5 years of professional experience.

Years of professional experience	Registrants in educational institutions	
	Number	Percent
All years	77,727	100
1 year	3,484	4
2 to 4 years	15,154	19
5 to 9 years	16,324	21
10 to 14 years	13,030	17
15 to 19 years	8,075	10
20 or more years	16,833	22
No report	4,827	6

[a] Includes universities, colleges, and secondary school systems.

Source -- National Register of Scientific and Technical Personnel, 1964.

HIGHEST DEGREE AND ACADEMIC RANK OF UNIVERSITY AND COLLEGE TEACHERS

- Two-thirds of the university and college teachers held doctorates.

Academic rank	Total registrants	Registrants with: Ph.D. degree	Professional medical degree	Master's degree	Bachelor's degree
All ranks	49,595	32,776	2,039	11,035	3,572
Dean	145	118	1	26	-
Professor	13,086	11,492	664	752	124
Associate professor	10,381	8,433	484	1,336	98
Assistant professor	11,343	8,078	410	2,599	222
Instructor	4,183	882	123	2,657	508
Lecturer	709	401	4	256	45
Research associate	235	145	49	28	11
Research assistant	3,367	123	37	1,664	1,534
Other	1,337	224	10	474	624
No report	4,809	2,880	257	1,243	406

Note: These data are based on scientists reporting teaching as a primary or secondary work activity.

Source -- National Register of Scientific and Technical Personnel, 1964.

SCIENTISTS EMPLOYED IN INDUSTRY AND BUSINESS

Scientific Field ●Almost one-half (45 percent) of the scientists employed in industry and business were in chemistry.

Field	Total registrants	Registrants in industry and business		
		Number	Percent of total	Percent
All fields	223,854	84,421	38	100
Chemistry	63,053	37,859	60	45
Earth sciences	17,907	8,400	47	10
Meteorology	5,510	594	11	1
Physics	26,698	8,954	34	11
Mathematics	17,411	6,935	40	8
Agricultural sciences	9,526	1,382	15	2
Biological sciences	27,135	2,720	10	3
Psychology	16,804	1,362	8	2
Statistics	2,843	1,055	37	1
Economics	12,143	3,967	33	5
Sociology	2,703	55	2	-
Linguistics	1,351	64	5	-
Other fields	20,770	11,074	53	13

Age ●Of scientists employed in industry and business, 16 percent were less than 30 years old.

Age	Registrants in industry and business	
	Number	Percent
All ages	84,421	100
20 - 24	1,781	2
25 - 29	11,495	14
30 - 34	15,845	19
35 - 39	17,109	20
40 - 44	15,137	18
45 - 49	10,152	12
50 - 54	6,503	8
55 - 59	3,670	4
60 - 64	1,988	2
65 - 69	466	1
70 and over	205	-
No report	70	-

Source -- National Register of Scientific and Technical Personnel, 1964.

SCIENTISTS EMPLOYED IN INDUSTRY AND BUSINESS

Primary Work Activity ●One-half (49 percent) of the scientists in industry and business were primarily engaged in applied research (19 percent) or in management or administration, including management or administration of research and development (30 percent).

Primary work activity	Registrants in industry and business	
	Number	Percent
All activities	84,421	100
Research and development	32,741	39
Basic research	(6,863)	(8)
Applied research	(15,924)	(19)
Management or administration	25,563	30
Management or administration of research and development	(14,722)	(17)
Teaching	170	-
Production and inspection	13,693	16
Other	10,602	13
No report	1,652	2

Years of Professional Experience ●Of scientists employed in industry and business, 15 percent had less than 5 years of professional experience.

Years of professional experience	Registrants in industry and business	
	Number	Percent
All years	84,421	100
1 year	2,325	3
2 to 4 years	10,302	12
5 to 9 years	17,752	21
10 to 14 years	18,758	22
15 to 19 years	11,125	13
20 or more years	21,160	25
No report	2,999	4

Source -- National Register of Scientific and Technical Personnel, 1964.

SCIENTISTS EMPLOYED IN THE FEDERAL GOVERNMENT

Scientific Field ●Almost one-third (31 percent) of the scientists employed in the Federal Government were in chemistry and agricultural fields.

Field	Total registrants	Registrants in the Federal Government		
		Number	Percent of total	Percent
All fields	223,854	23,405	10	100
Chemistry	63,053	4,004	6	17
Earth sciences	17,907	2,325	13	10
Meteorology	5,510	1,857	34	8
Physics	26,698	2,913	11	12
Mathematics	17,411	1,113	6	5
Agricultural sciences	9,526	3,295	35	14
Biological sciences	27,135	2,916	11	12
Psychology	16,804	1,378	8	6
Statistics	2,843	568	20	2
Economics	12,143	1,274	10	5
Sociology	2,703	137	5	1
Linguistics	1,351	72	5	-
Other fields	20,770	1,553	7	7

Age ●Twelve percent of the scientists employed in the Federal Government were less than 30 years old.

Age	Registrants in the Federal Government	
	Number	Percent
All ages	23,405	100
20 - 24	324	1
25 - 29	2,670	11
30 - 34	3,848	16
35 - 39	4,051	17
40 - 44	4,020	17
45 - 49	3,255	14
50 - 54	2,381	10
55 - 59	1,691	7
60 - 64	763	3
65 - 69	311	1
70 and over	51	-
No report	40	-

Source -- National Register of Scientific and Technical Personnel, 1964.

SCIENTISTS EMPLOYED IN THE FEDERAL GOVERNMENT

Primary Work Activity ●Of scientists in the Federal Government, 40 percent were engaged in basic or applied research; 32 percent were in management or administration, including management or administration of research and development.

Primary work activity	Registrants in the Federal Government	
	Number	Percent
All activities	23,405	100
Research and development	10,242	44
Basic research	(5,002)	(21)
Applied research	(4,535)	(19)
Management or administration	7,442	32
Management or administration of research and development	(3,846)	(16)
Teaching	203	1
Production and inspection	1,274	5
Other	3,654	16
No report	590	3

Years of Professional Experience ●Of scientists employed in the Federal Government, 15 percent had less than 5 years of professional experience.

Years of professional experience	Registrants in the Federal Government	
	Number	Percent
All years	23,405	100
1 year	485	2
2 to 4 years	3,147	13
5 to 9 years	4,617	20
10 to 14 years	4,698	20
15 to 19 years	2,995	13
20 or more years	6,786	29
No report	677	3

Source -- National Register of Scientific and Technical Personnel, 1964.

SCIENTISTS EMPLOYED IN NONPROFIT ORGANIZATIONS

Scientific Field ●Scientists employed in nonprofit organizations were concentrated in biological sciences, chemistry, and psychology.

Field	Total registrants	Registrants in nonprofit organizations		
		Number	Percent of total	Percent
All fields	223,854	8,722	4	100
Chemistry	63,053	1,679	3	19
Earth sciences	17,907	216	1	2
Meteorology	5,510	152	3	2
Physics	26,698	1,011	4	12
Mathematics	17,411	828	5	9
Agricultural sciences	9,526	99	1	1
Biological sciences	27,135	1,775	7	20
Psychology	16,804	1,574	9	18
Statistics	2,843	139	5	2
Economics	12,143	465	4	5
Sociology	2,703	160	6	2
Linguistics	1,351	100	7	1
Other fields	20,770	524	3	6

Age ●Of the scientists employed by nonprofit organizations, 12 percent were less than 30 years old.

Age	Registrants in nonprofit organizations	
	Number	Percent
All ages	8,722	100
20 - 24	111	1
25 - 29	972	11
30 - 34	1,654	19
35 - 39	1,875	21
40 - 44	1,609	18
45 - 49	972	11
50 - 54	659	8
55 - 59	430	5
60 - 64	259	3
65 - 69	101	1
70 and over	73	1
No report	7	-

Source -- National Register of Scientific and Technical Personnel, 1964.

SCIENTISTS EMPLOYED IN NONPROFIT ORGANIZATIONS

Primary Work Activity ●One-half of the scientists in nonprofit organizations were engaged in research and development; 24 percent were in management or administration, including management or administration of research and development.

Primary work activity	Registrants in nonprofit organizations	
	Number	Percent
All activities	8,722	100
Research and development	4,344	50
Basic research	(2,334)	(27)
Applied research	(1,739)	(20)
Management or administration	2,086	24
Management or administration of research and development	(1,257)	(14)
Teaching	154	2
Production and inspection	245	3
Other	1,689	19
No report	204	2

Years of Professional Experience ●Of scientists employed in nonprofit organizations, 16 percent had less than 5 years of professional experience.

Years of professional experience	Registrants in nonprofit organizations	
	Number	Percent
All years	8,722	100
1 year	244	3
2 to 4 years	1,163	13
5 to 9 years	1,958	22
10 to 14 years	1,962	22
15 to 19 years	1,131	13
20 or more years	1,919	22
No report	345	4

Source -- National Register of Scientific and Technical Personnel, 1964.

SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS

Highest Degree ● Highest median annual salaries were reported by the field of meteorology ($13,800) and physics ($13,500) for Ph. D.'s; by meteorology ($11,700) and statistics ($11,500) for master's degree holders; and by economics ($13,500) and sociology ($12,000) for bachelor's degree holders.

Field	Median annual salary of full-time employed civilian scientists		
	Ph.D. degree	Master's as highest degree	Bachelor's as highest degree
All fields	$12,000	$10,000	$10,000
Chemistry	13,000	10,600	9,900
Earth sciences	11,000	9,700	10,600
Meteorology	13,800	11,700	10,300
Physics	13,500	10,500	10,000
Mathematics	12,000	10,200	11,500
Agricultural sciences	11,300	8,800	8,400
Biological sciences	11,200	8,000	7,700
Psychology	11,000	8,900	9,900
Statistics	13,000	11,500	11,500
Economics	12,100	11,000	13,500
Sociology	10,400	8,900	12,000
Linguistics	10,000	7,100	6,300
Other fields	13,500	10,800	10,600

Age ● Median salaries increased for each age group up to ages 55 - 59, decreasing for higher age groups.

Age	Median annual salary of full-time employed civilian scientists
All ages	$11,000
20 - 24	7,000
25 - 29	8,000
30 - 34	9,500
35 - 39	11,000
40 - 44	12,100
45 - 49	13,000
50 - 54	13,300
55 - 59	13,400
60 - 64	13,300
65 - 69	12,500
70 and over	12,000

Note: Salaries reported by highest degree should be further evaluated in terms of employer, years of experience, etc.

Source -- National Register of Scientific and Technical Personnel, 1964.

SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS

Type of Employer ● Median salary was highest among self-employed scientists -- $15,000.

Type of employer	Median annual salary of full-time employed civilian scientists
All employers	$11,000
Educational institutions [a]	9,600
Federal Government	11,000
Other government [b]	9,000
Nonprofit organizations	12,000
Industry and business	12,000
Self-employed	15,000
Other	11,000

Primary Work Activity ● Highest median salary was for scientists managing or administering research and development -- $15,500.

Primary work activity	Median annual salary of full-time employed civilian scientists
All activities	$11,000
Research and development	11,000
Basic research	(11,000)
Applied research	(11,000)
Management or administration	14,500
Management or administration of research and development	(15,500)
Teaching [c]	8,900
Production and inspection	9,800
Other	10,500

[a] Includes universities, colleges, and secondary school systems. Salaries do not account for number of months employed.

[b] Includes State, local, regional, and international agencies.

[c] Reflects a composite of high school and college academic and calendar year salaries.

Note: See Table A-16 for academic and calendar year salaries.

Source -- National Register of Scientific and Technical Personnel, 1964.

SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS

Years of Professional Experience ●Median salaries of scientists increased in relation to length of professional experience.

Years of professional experience	Median annual salary of full-time employed civilian scientists
All years	$11,000
1 year	7,400
2 to 4 years	8,000
5 to 9 years	9,600
10 to 14 years	11,500
15 to 19 years	12,500
20 or more	14,000

Source -- National Register of Scientific and Technical Personnel, 1964.

GEOGRAPHIC LOCATION OF SCIENTISTS

Selected States

●In each of eleven geographic locations there were more than 7,000 registrants. Scientists in the District of Columbia reported the highest median salary ($13,000).

Geographic locations	Total registrants	Median annual salary of full-time employed civilian scientists
All locations	223,854	$11,000
Selected States	139,437	-
California	26,645	12,000
New York	24,510	11,800
Pennsylvania	12,813	11,000
New Jersey	11,844	12,000
Illinois	11,537	10,800
Texas	10,660	10,300
Ohio	10,135	10,600
Massachusetts	9,540	11,000
Michigan	7,573	10,800
District of Columbia	7,175	13,000
Maryland	7,005	11,700

Selected Standard Metropolitan Statistical Areas

●In each of seventeen metropolitan areas there were over 2,000 registrants. The Wilmington, Del. area reported the highest median salary ($13,500).

Standard Metropolitan Statistical Areas	Total registrants	Median annual salary of full-time employed civilian scientists
All locations	223,854	$11,000
Selected metropolitan areas	91,388	-
New York, N.Y.	14,870	12,000
Washington, D.C. - Md. - Va.	11,788	12,600
Los Angeles - Long Beach, Calif.	9,390	12,500
Chicago, Ill.	7,615	11,200
Boston, Mass.	7,230	11,500
San Francisco - Oakland, Calif.	6,342	12,000
Philadelphia, Pa. - N.J.	6,197	11,300
Newark, N.J.	4,462	12,100
Pittsburgh, Pa.	2,932	11,900
Minneapolis - St. Paul, Minn.	2,898	11,000
San Jose, Calif.	2,761	12,600
Houston, Tex.	2,642	12,000
Denver, Colo.	2,609	11,000
Wilmington, Del.-N.J.-Md.	2,594	13,500
Cleveland, Ohio	2,550	11,000
Detroit, Mich.	2,256	10,900
St. Louis, Mo. - Ill.	2,252	11,200

Source -- National Register of Scientific and Technical Personnel, 1964.

SCIENTISTS WITH FOREIGN LANGUAGE KNOWLEDGE

Scientific Field ●Foreign language knowledge of scientists ranged from 56 to 98 percent, depending on the field of specialization.

Field	Total registrants	Registrants reporting a foreign language		
		Number	Percent of total	Percent
All fields	223,854	180,925	81	100
Chemistry	63,053	52,913	84	29
Earth sciences	17,907	14,073	79	8
Meteorology	5,510	3,777	69	2
Physics	26,698	23,663	89	13
Mathematics	17,411	14,226	82	8
Agricultural sciences	9,526	5,356	56	3
Biological sciences	27,135	23,644	87	13
Psychology	16,804	13,692	81	8
Statistics	2,843	2,165	76	1
Economics	12,143	9,372	77	5
Sociology	2,703	2,450	91	1
Linguistics	1,351	1,325	98	1
Other fields	20,770	14,269	69	8

Foreign Language Proficiency ●Of scientists reporting some proficiency in foreign languages, over 100,000 individuals were able to translate foreign technical journals into English.

Level of proficiency	Number
Can prepare and deliver lectures	
Fluently	20,866
Superficially	28,860
Can converse	
Fluently	25,414
Passably	68,612
Have facility to translate technical journals	
Into English	108,391
From English	28,561
Can read technical articles for own use	
Easily	104,211
With difficulty	115,050
Some knowledge but can't use as medium of communication	78,862
No report of proficiency	142,672

NOTE: These data are based on a maximum of two foreign languages reported by 179,543 of the 223, 854 total registrants.

Source -- National Register of Scientific and Technical Personnel, 1964.

SCIENTISTS WITH FOREIGN AREA KNOWLEDGE

Scientific Field ●Knowledge of foreign areas was reported by 69 percent of those in linguistics, and about 40 percent of those in sociology and meteorology.

Field	Total registrants	Registrants with foreign area knowledge	
		Number	Percent of total
All fields	223,854	47,495	21
Chemistry	63,053	9,938	16
Earth sciences	17,907	4,861	27
Meteorology	5,510	2,248	41
Physics	26,698	4,721	18
Mathematics	17,411	3,285	19
Agricultural sciences	9,526	1,536	16
Biological sciences	27,135	7,332	27
Psychology	16,804	3,084	18
Statistics	2,843	607	21
Economics	12,143	3,990	33
Sociology	2,703	1,126	42
Linguistics	1,351	934	69
Other fields	20,770	3,833	18

Source -- National Register of Scientific and Technical Personnel, 1964.

SCIENTISTS RECEIVING FEDERAL SUPPORT

Scientific Field ● Most of the scientists in meteorology (87 percent) and agricultural sciences (67 percent) received Federal support.

Field	Total registrants	Registrants receiving Federal support	
		Number	Percent of total
All fields	223,854	97,004	43
Chemistry	63,053	19,305	31
Earth sciences	17,907	4,808	27
Meteorology	5,510	4,814	87
Physics	26,698	16,718	63
Mathematics	17,411	7,818	45
Agricultural sciences	9,526	6,406	67
Biological sciences	27,135	16,123	59
Psychology	16,804	6,397	38
Statistics	2,843	1,484	52
Economics	12,143	3,589	30
Sociology	2,703	985	36
Linguistics	1,351	403	30
Other fields	20,770	8,154	39

Highest Degree ● Almost one-third (31 percent) of the Ph. D.'s receiving Federal support were in health programs; 35 percent of the master's degree holders and 39 percent of the bachelor's degree holders were supported by Federal defense programs.

Government program	Registrants receiving Federal support			
	Total	Ph.D. degree	Master's as highest degree	Bachelor's as highest degree
All programs	97,004 [a]	39,613	23,752	27,116
Agriculture	10,957	5,501	2,618	2,610
Atomic energy	11,267	5,093	2,694	3,239
Defense	29,399	8,954	8,360	10,600
Education	8,679	4,400	2,611	1,353
Health	20,736	12,204	2,470	2,298
International	1,835	890	439	401
Natural resources	6,822	1,610	1,859	3,216
Public works	1,298	231	320	683
Space	13,625	4,309	3,914	4,984
Other	13,144	5,538	3,164	3,642

[a] Of this number, 20,758 reported support from more than one Federal program, hence the number of scientists by program do not add to the total.

Source -- National Register of Scientific and Technical Personnel, 1964.

SCIENTISTS RECEIVING FEDERAL SUPPORT

Type of Employer ●More than one-third (39 percent) of all scientists receiving Federal support were employed by educational institutions and 20 percent were employed by industry and business.

Type of employer	Total registrants	Registrants receiving Federal support	
		Number	Percent
All registrants [a]	223,854	97,004	100
Educational institutions [b]	77,727	37,915	39
Federal Government	23,405	23,405	24
Other government [c]	7,472	3,646	4
Military	5,522	5,522	6
Nonprofit organizations	8,722	5,314	5
Industry and business	84,421	19,771	20
Self-employed	4,277	620	1
Other	1,434	593	1
No report	1,257	218	-

[a] There were 9,617 registrants not employed, including retired persons, housewives, etc.

[b] Includes universities, colleges, and secondary school systems.

[c] Includes State, local, regional, and international agencies.

Note: Scientists employed by Federal Government and Military receive their salaries directly from the U.S. Treasury. Scientists employed by other types of employers are supported or sponsored in whole or in part by Federal funds through contracts or grants.

Source -- National Register of Scientific and Technical Personnel, 1964.

WOMEN SCIENTISTS

Scientific Field ● Of all scientists in psychology, 22 percent were women. Almost one-half (47 percent) of the women were concentrated in the fields of chemistry and psychology.

Field	Total registrants	Women		
		Number	Percent of total	Percent
All fields	223,854	17,104	8	100
Chemistry	63,053	4,204	7	25
Earth sciences	17,907	517	3	3
Meteorology	5,510	86	2	1
Physics	26,698	856	3	5
Mathematics	17,411	1,747	10	10
Agricultural sciences	9,526	51	1	-
Biological sciences	27,135	3,107	11	18
Psychology	16,804	3,747	22	22
Statistics	2,843	289	10	2
Economics	12,143	493	4	3
Sociology	2,703	407	15	2
Linguistics	1,351	261	19	2
Other fields	20,770	1,339	6	8

Highest Degree ● More than one-third (34 percent) of all women Ph.D. degree holders were in psychology and 23 percent were in biological sciences. Twenty-eight percent of women holding the master's degree were in psychology and 16 percent were in chemistry. Almost one-half (45 percent) of all women holding the bachelor's degree were in chemistry.

Field	Women			
	Total	Ph.D. degree	Master's as highest degree	Bachelor's as highest degree
All fields	17,104	5,458	6,526	4,661
Chemistry	4,204	976	1,041	2,111
Earth sciences	517	99	202	206
Meteorology	86	11	28	37
Physics	856	212	334	299
Mathematics	1,747	266	954	492
Agricultural sciences	51	7	12	28
Biological sciences	3,107	1,235	971	650
Psychology	3,747	1,836	1,803	94
Statistics	289	55	126	93
Economics	493	195	228	61
Sociology	407	272	116	14
Linguistics	261	104	115	33
Other fields	1,339	190	596	543

Source -- National Register of Scientific and Technical Personnel, 1964.

WOMEN SCIENTISTS

Type of Employer

●One-half of the women scientists were employed by educational institutions.

Type of employer	Women	
	Number	Percent
All registrants [a]	17,104	100
Educational institutions [b]	8,378	49
Federal Government	1,347	8
Other government [c]	858	5
Military	50	-
Nonprofit organizations	1,110	6
Industry and business	2,241	13
Self-employed	469	3
Other	209	1
No report	134	1

Primary Work Activity

●Research and development and teaching were the primary work activities reported by women.

Primary work activity	Women	
	Number	Percent
All activities [a]	17,104	100
Research and development	5,279	31
Basic research	(2,862)	(17)
Applied research	(2,130)	(12)
Management or administration	1,065	6
Management or administration of research and development	(483)	(3)
Teaching	4,897	29
Production and inspection	612	4
Other	2,416	14
No report	527	3

---

[a] There were 2,308 (13 percent) of women scientists not employed, including retired persons, housewives, etc.

[b] Includes universities, colleges, and secondary school systems.

[c] Includes State, local, regional, and international agencies.

Source -- National Register of Scientific and Technical Personnel, 1964.

WOMEN SCIENTISTS

Years of Professional Experience

- About one-fourth of women scientists had less than 5 years of professional experience.

Years of professional experience	Women	
	Number	Percent
All years	17,104	100
One year	785	5
2 to 4 years	3,213	19
5 to 9 years	3,439	20
10 to 14 years	2,456	14
15 to 19 years	1,866	11
20 or more	4,153	24
No report	1,192	7

Salaries of Full-Time Employed Women Scientists

- The highest median annual salaries of women scientists were in the fields of statistics and economics ($10,000).

Field	Median annual salary of full-time employed civilian women scientists
All fields	$8,400
Chemistry	7,700
Earth sciences	8,200
Meteorology	8,200
Physics	8,600
Mathematics	8,500
Agricultural sciences	7,200
Biological sciences	8,400
Psychology	9,000
Statistics	10,000
Economics	10,000
Sociology	9,000
Linguistics	7,500
Other fields	7,500

Source -- National Register of Scientific and Technical Personnel, 1964.

PART III

Selected Tables

List of Selected Tables

Page

1. General characteristics of U.S. scientists in the National Register of Scientific and Technical Personnel, 1964 56
2. Number of scientists, by field and employment status, 1964 57
3. Number of scientists, by field and highest degree, 1964 57
4. Number of scientists, by age and highest degree, 1964 57
5. Number of scientists, by employment status and highest degree, 1964 58
6. Number of scientists, by type of employer and highest degree, 1964 58
7. Number of scientists, by work activity and highest degree, 1964 58
8. Number of scientists, by years of professional experience and highest degree, 1964 59
9. Number of scientists, by field and type of employer, 1964 59
10. Number of scientists, by age and type of employer, 1964 59
11. Number of scientists, by work activity and type of employer, 1964 60
12. Number of scientists, by years of professional experience and type of employer, 1964 60
13. Salary distribution of full-time employed civilian scientists, by field, 1964 61
14. Median annual salaries of full-time employed civilian scientists, by field and highest degree, 1964 61
15. Median annual salaries of full-time employed civilian scientists, by field and age, 1964 61
16. Median annual salaries of full-time employed civilian scientists, by field and type of employer, 1964 62
17. Median annual salaries of full-time employed civilian scientists, by field and work activity, 1964 62
18. Median annual salaries of full-time employed civilian scientists, by field and years of professional experience, 1964 62
19. Median annual salaries of full-time employed civilian scientists, by highest degree and type of employer, 1964 63
20. Median annual salaries of full-time employed civilian scientists, by work activity and type of employer, 1964 63
21. Median annual salaries of full-time employed civilian scientists, by years of professional experience and type of employer, 1964 63
22. Number of scientists, by selected States and field, 1964 64
23. Number of scientists, by selected States and highest degree, 1964 64
24. Number of scientists, by selected States and type of employer, 1964 65
25. Number of scientists, by selected States and work activity, 1964 65
26. Number and median annual salaries of full-time employed civilian scientists, by State, 1964 66
27. Number of scientists, by selected Standard Metropolitan Statistical Areas and field, 1964 67
28. Number of scientists, by selected Standard Metropolitan Statistical Areas and highest degree, 1964 68
29. Number of scientists, by selected Standard Metropolitan Statistical Areas and type of employer, 1964 68
30. Number of scientists, by selected Standard Metropolitan Statistical Areas and work activity, 1964 69
31. Number and median annual salaries of full-time employed civilian scientists, by Standard Metropolitan Statistical Areas, 1964 70
32. Number of scientists with a knowledge of selected foreign languages, by field, 1964 71
33. Number of scientists with a knowledge of selected foreign languages, by proficiencies, 1964 72
34. Number of scientists with a knowledge of selected foreign areas, by field, 1964 72
35. Median annual salaries of full-time employed civilian scientists, by subfield, 1964 73
36. Number of scientists receiving Federal support, by field and program, 1964 74
37. Number of scientists receiving Federal support, by highest degree and program, 1964 74
38. Number of scientists receiving Federal support, by type of employer and program, 1964 75
39. Number of scientists receiving Federal support, by work activity and program, 1964 75
40. Number of scientists receiving Federal support, by State and program, 1964 76
41. Number and percent of scientists, by field and sex, 1964 77
42. Number of women scientists, by field and highest degree, 1964 78
43. Number of women scientists, by field and type of employer, 1964 78
44. Number of women scientists, by field and work activity, 1964 78
45. Number of women scientists, by field and years of professional experience, 1964 79
46. Number of scientists, by field and professional identification, 1964 79
47. Number of scientists, by field and major subject of highest degree, 1964 80
48. Number of scientists, by field and field of employment, 1964 80

TABLE 1.-GENERAL CHARACTERISTICS OF U.S. SCIENTISTS IN THE NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964

CHARACTERISTICS	NUMBER	PERCENT
REGISTERED SCIENTISTS	223,854	100
MEN	206,750	92
WOMEN	17,104	8
FIELD OF SCIENCE		
CHEMISTRY	63,053	28
EARTH SCIENCES	17,907	8
METEOROLOGY	5,510	2
PHYSICS	26,698	12
MATHEMATICS	17,411	8
AGRICULTURAL SCIENCES	9,526	4
BIOLOGICAL SCIENCES	27,135	12
PSYCHOLOGY	16,804	8
STATISTICS	2,843	1
ECONOMICS	12,143	5
SOCIOLOGY	2,703	1
LINGUISTICS	1,351	1
OTHER FIELDS	20,770	9
HIGHEST DEGREE		
PH.D.	79,372	35
PROFESSIONAL MEDICAL	5,925	3
MASTER'S	61,222	27
BACHELOR'S	72,364	32
LESS THAN BACHELOR'S	2,878	1
NO REPORT	2,093	1
AGE (MEDIAN AGE 38)		
20-24	8,247	4
25-29	34,102	15
30-34	39,896	18
35-39	40,148	18
40-44	35,831	16
45-49	24,726	11
50-54	16,921	8
55-59	11,308	5
60-64	6,966	3
65-69	3,428	2
70 OR OVER	1,992	1
NO REPORT	289	---
EMPLOYMENT STATUS		
FULL-TIME EMPLOYED	193,943	87
CIVILIAN	189,350	85
MILITARY	4,593	2
PART-TIME EMPLOYED	3,560	2
STUDENTS	18,039	8
PART-TIME EMPLOYED	13,397	6
NOT EMPLOYED	4,642	2
EMPLOYED BUT NOT PROFESSIONAL WORK	2,933	1
NOT EMPLOYED	4,975	2
NO REPORT	404	---

CHARACTERISTICS	NUMBER	PERCENT
TYPE OF EMPLOYER		
EDUCATIONAL INSTITUTIONS	77,727	35
FEDERAL GOVERNMENT	23,405	10
OTHER GOVERNMENT	7,472	3
MILITARY	5,522	2
NONPROFIT ORGANIZATIONS	8,722	4
INDUSTRY AND BUSINESS	84,421	38
SELF-EMPLOYED	4,277	2
OTHER	1,434	1
NOT EMPLOYED	9,617	4
NO REPORT	1,257	1
WORK ACTIVITY		
RESEARCH AND DEVELOPMENT	77,699	35
BASIC RESEARCH	35,781	16
APPLIED RESEARCH	30,280	14
MANAGEMENT OR ADMINISTRATION	46,255	21
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	24,568	11
TEACHING	41,209	18
PRODUCTION AND INSPECTION	16,582	7
OTHER	26,301	12
NOT EMPLOYED	9,617	4
NO REPORT	6,191	3
YEARS OF PROFESSIONAL EXPERIENCE		
1 OR LESS	8,303	4
2-4	34,864	16
5-9	45,249	20
10-14	42,706	19
15-19	26,304	12
20 OR MORE	53,778	24
NO REPORT	12,650	6

1964 SALARY

SALARY DISTRIBUTION OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS	
LOWER DECILE	7,100
LOWER QUARTILE	8,600
MEDIAN	11,000
UPPER QUARTILE	14,000
UPPER DECILE	18,000

NOTE - PERCENTS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 2.-NUMBER OF SCIENTISTS, BY FIELD AND EMPLOYMENT STATUS, 1964

SCIENTIFIC AND TECHNICAL FIELD	TOTAL	EMPLOYMENT STATUS										NO REPORT OF EMPLOYMENT STATUS
		FULL-TIME EMPLOYED			PART-TIME EMPLOYED	STUDENTS			EMPLOYED BUT NOT PROFESSIONAL WORK	NOT EMPLOYED		
		TOTAL	CIVILIAN	MILITARY		TOTAL	PART-TIME EMPLOYED	NOT EMPLOYED				
ALL FIELDS	223,854	193,943	189,350	4,593	3,560	18,039	13,397	4,642	2,933	4,975		404
CHEMISTRY	63,053	54,218	53,831	387	631	5,539	4,188	1,351	768	1,817		80
EARTH SCIENCES	17,907	14,987	14,866	121	368	1,691	1,211	480	357	482		22
METEOROLOGY	5,510	5,015	2,962	2,053	32	217	168	49	151	91		4
PHYSICS	26,698	21,431	21,057	374	220	4,504	3,501	1,003	172	347		24
MATHEMATICS	17,411	15,530	15,293	237	207	1,231	946	285	125	277		41
AGRICULTURAL SCIENCES	9,526	8,755	8,742	13	92	447	369	78	135	82		15
BIOLOGICAL SCIENCES	27,135	24,119	23,357	762	512	1,914	1,439	475	146	364		80
PSYCHOLOGY	16,804	14,751	14,557	194	807	580	417	163	131	495		40
STATISTICS	2,843	2,581	2,556	25	41	144	114	30	35	36		6
ECONOMICS	12,143	10,546	10,502	44	223	539	364	175	450	335		50
SOCIOLOGY	2,703	2,469	2,459	10	101	31	15	16	15	81		6
LINGUISTICS	1,351	1,086	1,085	1	38	162	78	84	18	42		5
OTHER FIELDS	20,770	18,455	18,083	372	288	1,040	587	453	430	526		31

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 3.-NUMBER OF SCIENTISTS, BY FIELD AND HIGHEST DEGREE, 1964

SCIENTIFIC AND TECHNICAL FIELD	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ALL FIELDS	223,854	79,372	5,925	61,222	72,364	2,878	2,093
CHEMISTRY	63,053	21,789	368	12,229	27,377	590	700
EARTH SCIENCES	17,907	3,578	1	5,829	8,101	254	144
METEOROLOGY	5,510	479	------	1,137	2,524	1,147	223
PHYSICS	26,698	10,286	30	8,352	7,673	185	172
MATHEMATICS	17,411	4,603	5	7,464	4,917	210	212
AGRICULTURAL SCIENCES	9,526	2,367	11	2,676	4,362	63	47
BIOLOGICAL SCIENCES	27,135	13,355	5,408	5,028	3,172	71	101
PSYCHOLOGY	16,804	10,843	52	5,464	417	4	24
STATISTICS	2,843	804	3	1,133	810	43	50
ECONOMICS	12,143	5,091	2	4,204	2,613	90	143
SOCIOLOGY	2,703	2,179	9	434	65	3	13
LINGUISTICS	1,351	729	2	407	162	1	50
OTHER FIELDS	20,770	3,269	34	6,865	10,171	217	214

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 4.-NUMBER OF SCIENTISTS, BY AGE AND HIGHEST DEGREE, 1964

AGE	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ALL AGES	223,854	79,372	5,925	61,222	72,364	2,878	2,093
20-24	8,247	47	2	1,611	6,491	52	44
25-29	34,102	5,704	283	12,484	15,356	145	130
30-34	39,896	14,142	976	12,324	11,858	340	256
35-39	40,148	16,167	1,238	10,769	11,193	461	320
40-44	35,831	14,796	1,182	8,924	10,089	510	330
45-49	24,726	10,220	807	5,704	7,226	473	296
50-54	16,921	6,942	592	4,059	4,665	392	271
55-59	11,308	4,998	401	2,704	2,729	273	203
60-64	6,966	3,392	273	1,507	1,521	130	143
65-69	3,428	1,759	124	715	701	70	59
70 AND OVER	1,992	1,111	45	332	434	31	39
NO REPORT	289	94	2	89	101	1	2

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 5.-NUMBER OF SCIENTISTS, BY EMPLOYMENT STATUS AND HIGHEST DEGREE, 1964

EMPLOYMENT STATUS	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ALL REGISTRANTS	223,854	79,372	5,925	61,222	72,364	2,878	2,093
FULL-TIME EMPLOYED	193,943	75,275	5,562	48,858	59,838	2,591	1,819
CIVILIAN	189,350	74,674	5,094	47,642	58,282	1,955	1,703
MILITARY	4,593	601	468	1,216	1,556	636	116
PART-TIME EMPLOYED	3,560	1,352	172	1,171	791	34	40
STUDENTS	18,039	763	136	8,952	8,051	53	84
PART-TIME EMPLOYED	13,397	513	95	6,752	5,963	22	52
NOT EMPLOYED	4,642	250	41	2,200	2,088	31	32
EMPLOYED BUT NOT PROFESSIONAL WORK	2,933	334	10	761	1,695	93	40
NOT EMPLOYED	4,975	1,531	20	1,355	1,898	97	74
NO REPORT	404	117	25	125	91	10	36

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 6.-NUMBER OF SCIENTISTS, BY TYPE OF EMPLOYER AND HIGHEST DEGREE, 1964

TYPE OF EMPLOYER	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ALL EMPLOYERS	223,854	79,372	5,925	61,222	72,364	2,878	2,093
EDUCATIONAL INSTITUTIONS	77,727	42,112	2,986	22,044	10,212	85	288
FEDERAL GOVERNMENT	23,405	6,717	371	6,085	9,521	510	201
OTHER GOVERNMENT	7,472	1,969	248	2,637	2,484	75	59
MILITARY	5,522	649	472	1,428	2,209	645	119
NONPROFIT ORGANIZATIONS	8,722	4,056	874	2,195	1,449	75	73
INDUSTRY AND BUSINESS	84,421	19,979	347	21,489	40,233	1,250	1,123
SELF-EMPLOYED	4,277	1,344	478	880	1,441	79	55
OTHER	1,434	516	56	458	366	14	24
NOT EMPLOYED	9,617	1,781	61	3,555	3,986	128	106
NO REPORT	1,257	249	32	451	463	17	45

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 7.-NUMBER OF SCIENTISTS, BY WORK ACTIVITY AND HIGHEST DEGREE, 1964

WORK ACTIVITY	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ALL ACTIVITIES	223,854	79,372	5,925	61,222	72,364	2,878	2,093
RESEARCH AND DEVELOPMENT (A)	77,699	31,674	2,609	20,380	22,002	488	546
BASIC RESEARCH	35,781	20,343	1,426	7,282	6,434	112	184
APPLIED RESEARCH	30,280	10,362	1,174	9,768	8,563	206	207
MANAGEMENT OR ADMINISTRATION (B)	46,255	15,244	885	11,237	17,565	771	553
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	24,568	10,732	552	5,788	7,002	242	252
TEACHING	41,209	22,673	888	12,875	4,604	27	142
PRODUCTION AND INSPECTION	16,582	723	14	3,494	11,731	332	288
OTHER	26,301	5,430	1,173	8,030	10,315	1,012	341
NOT EMPLOYED	9,617	1,781	61	3,555	3,986	128	106
NO REPORT	6,191	1,847	295	1,651	2,161	120	117

(A) INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B) INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 8.-NUMBER OF SCIENTISTS, BY YEARS OF PROFESSIONAL EXPERIENCE AND HIGHEST DEGREE, 1964

YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ALL YEARS	223,854	79,372	5,925	61,222	72,364	2,878	2,093
1 YEAR	8,303	2,191	97	2,258	3,737	------	20
2 TO 4	34,864	9,447	563	11,328	13,315	79	132
5 TO 9	45,249	15,610	1,054	13,751	14,200	368	266
10 TO 14	42,706	16,769	1,110	11,670	12,305	498	354
15 TO 19	26,304	9,837	913	6,522	8,099	603	330
20 OR MORE	53,778	22,446	1,905	11,846	15,481	1,219	881
NO REPORT	12,650	3,072	283	3,847	5,227	111	110

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 9.-NUMBER OF SCIENTISTS, BY FIELD AND TYPE OF EMPLOYER, 1964

SCIENTIFIC AND TECHNICAL FIELD	TOTAL	TYPE OF EMPLOYER								NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER		
ALL FIELDS	223,854	77,727	23,405	7,472	5,522	8,722	84,421	4,277	1,434	9,617	1,257
CHEMISTRY	63,053	13,616	4,004	888	648	1,679	37,859	589	311	3,168	291
EARTH SCIENCES	17,907	4,023	2,325	658	241	216	8,400	821	87	962	174
METEOROLOGY	5,510	527	1,857	78	2,113	152	594	18	16	140	15
PHYSICS	26,698	11,611	2,913	89	473	1,011	8,954	166	25	1,350	106
MATHEMATICS	17,411	7,206	1,113	211	277	828	6,935	115	83	562	81
AGRICULTURAL SCIENCES	9,526	2,833	3,295	1,440	47	99	1,382	174	36	160	60
BIOLOGICAL SCIENCES	27,135	15,872	2,916	1,203	790	1,775	2,720	647	202	839	171
PSYCHOLOGY	16,804	8,162	1,378	1,901	230	1,574	1,362	1,144	274	658	121
STATISTICS	2,843	778	568	122	31	139	1,055	25	38	66	21
ECONOMICS	12,143	5,061	1,274	284	83	465	3,967	195	207	510	97
SOCIOLOGY	2,703	2,080	137	115	10	160	55	20	21	97	8
LINGUISTICS	1,351	930	72	25	1	100	64	4	10	126	19
OTHER FIELDS	20,770	5,028	1,553	458	578	524	11,074	359	124	979	93

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 10.-NUMBER OF SCIENTISTS, BY AGE AND TYPE OF EMPLOYER, 1964

AGE	TOTAL	TYPE OF EMPLOYER								NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER		
ALL AGES	223,854	77,727	23,405	7,472	5,522	8,722	84,421	4,277	1,434	9,617	1,257
20-24	8,247	3,844	324	136	464	111	1,781	13	31	1,370	173
25-29	34,102	13,043	2,670	929	1,483	972	11,495	100	172	2,878	360
30-34	39,896	14,159	3,848	1,292	1,067	1,654	15,845	308	228	1,317	178
35-39	40,148	13,017	4,051	1,424	825	1,875	17,109	751	234	727	135
40-44	35,831	11,229	4,020	1,294	884	1,609	15,137	843	257	464	94
45-49	24,726	7,796	3,255	833	541	972	10,152	659	163	266	89
50-54	16,921	5,626	2,381	649	174	659	6,503	538	141	183	67
55-59	11,308	4,236	1,691	477	66	430	3,670	396	86	206	50
60-64	6,966	2,917	763	269	15	259	1,988	288	71	351	45
65-69	3,428	1,367	311	127	1	101	466	212	31	784	28
70 AND OVER	1,992	369	51	31	------	73	205	162	17	1,054	30
NO REPORT	289	124	40	11	2	7	70	7	3	17	8

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 11.-NUMBER OF SCIENTISTS, BY WORK ACTIVITY AND TYPE OF EMPLOYER, 1964

WORK ACTIVITY	TOTAL	TYPE OF EMPLOYER: EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER	NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
ALL ACTIVITIES	223,854	77,727	23,405	7,472	5,522	8,722	84,421	4,277	1,434	9,617	1,257
RESEARCH AND DEVELOPMENT (A)	77,699	26,392	10,242	2,006	999	4,344	32,741	343	478	-----	154
BASIC RESEARCH	35,781	19,894	5,002	779	531	2,334	6,863	80	210	-----	88
APPLIED RESEARCH	30,280	6,047	4,535	1,148	405	1,739	15,924	194	231	-----	57
MANAGEMENT OR ADMINISTRATION (B)	46,255	5,778	7,442	2,528	1,854	2,086	25,563	569	347	-----	88
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	24,568	2,793	3,846	908	631	1,257	14,722	203	171	-----	37
TEACHING	41,209	39,926	203	302	242	154	170	34	98	-----	80
PRODUCTION AND INSPECTION	16,582	249	1,274	601	180	245	13,693	214	98	-----	28
OTHER	26,301	3,325	3,654	1,798	1,909	1,689	10,602	2,865	358	-----	101
NOT EMPLOYED	9,617	-----	-----	-----	-----	-----	-----	-----	-----	9,617	-----
NO REPORT	6,191	2,057	590	237	338	204	1,652	252	55	-----	806

(A) INCLUDES DEVELOPMENT AND DESIGN, NOT SEPARATELY IDENTIFIED.
(B) INCLUDES MANAGEMENT AND ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 12.—NUMBER OF SCIENTISTS, BY YEARS OF PROFESSIONAL EXPERIENCE AND TYPE OF EMPLOYER, 1964

YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	TYPE OF EMPLOYER: EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER	NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
ALL YEARS	223,854	77,727	23,405	7,472	5,522	8,722	84,421	4,277	1,434	9,617	1,257
1 YEAR	8,303	3,484	485	222	458	244	2,325	19	54	907	105
2 TO 4	34,864	15,154	3,147	1,183	1,276	1,163	10,302	135	195	2,069	240
5 TO 9	45,249	16,324	4,617	1,617	908	1,958	17,752	425	253	1,258	137
10 TO 14	42,706	13,030	4,698	1,569	871	1,962	18,758	927	290	504	97
15 TO 19	26,304	8,075	2,995	941	793	1,131	11,125	722	170	270	82
20 OR MORE	53,778	16,833	6,786	1,645	721	1,919	21,160	1,781	396	2,311	226
NO REPORT	12,650	4,827	677	295	495	345	2,999	268	76	2,298	370

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 13.—SALARY DISTRIBUTION OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD, 1964

SCIENTIFIC AND TECHNICAL FIELD	LOWER DECILE	LOWER QUARTILE	MEDIAN	UPPER QUARTILE	UPPER DECILE
ALL FIELDS	7,100	8,600	11,000	14,000	18,000
CHEMISTRY	7,200	8,700	11,000	14,000	17,500
EARTH SCIENCES	7,100	8,500	10,300	13,000	17,000
METEOROLOGY	7,900	9,000	10,600	12,900	15,500
PHYSICS	7,400	9,000	12,000	15,000	18,700
MATHEMATICS	7,000	8,600	11,000	14,700	18,500
AGRICULTURAL SCIENCES	6,200	7,500	9,200	11,400	14,000
BIOLOGICAL SCIENCES	6,500	8,300	10,700	14,500	19,000
PSYCHOLOGY	7,300	8,500	10,300	12,900	16,300
STATISTICS	8,000	9,500	12,000	14,900	17,200
ECONOMICS	7,900	9,300	12,000	16,000	20,000
SOCIOLOGY	7,300	8,500	10,100	13,000	16,000
LINGUISTICS	5,800	7,200	9,000	11,900	15,000
OTHER FIELDS	7,000	8,600	11,100	15,000	18,500

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 14.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD AND HIGHEST DEGREE, 1964

SCIENTIFIC AND TECHNICAL FIELD	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ALL FIELDS	11,000	12,000	15,500	10,300	10,000	10,300	10,800
CHEMISTRY	11,000	13,000	13,000	10,600	9,900	10,000	10,000
EARTH SCIENCES	10,300	11,000	------	9,700	10,600	11,500	10,800
METEOROLOGY	10,600	13,300	------	11,700	10,300	9,500	9,800
PHYSICS	12,000	13,500	------	10,500	10,000	11,700	11,500
MATHEMATICS	11,000	12,000	------	10,200	11,500	11,500	12,000
AGRICULTURAL SCIENCES	9,200	11,300	------	8,300	8,400	9,500	8,000
BIOLOGICAL SCIENCES	10,700	11,200	16,000	8,000	7,700	10,000	10,000
PSYCHOLOGY	10,300	11,000	15,500	8,900	9,900	------	------
STATISTICS	12,000	13,000	------	11,500	11,500	10,600	12,000
ECONOMICS	12,000	12,100	------	11,000	13,500	16,700	13,000
SOCIOLOGY	10,100	10,400	------	8,900	12,000	------	------
LINGUISTICS	9,000	10,000	------	7,100	6,300	------	9,500
OTHER FIELDS	11,100	13,500	------	10,800	10,600	12,000	12,000

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 15.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD AND AGE, 1964

SCIENTIFIC AND TECHNICAL FIELD	TOTAL	AGE											NO REPORT OF AGE
		20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70 AND OVER	
ALL FIELDS	11,000	7,000	8,300	9,500	11,000	12,100	13,000	13,350	13,400	13,300	12,500	12,000	9,100
CHEMISTRY	11,000	6,900	8,000	9,900	11,200	12,500	13,700	14,000	13,700	13,400	12,700	12,000	13,600
EARTH SCIENCES	10,300	5,800	7,400	8,700	10,300	11,600	12,500	14,000	14,000	14,100	14,000	12,000	------
METEOROLOGY	10,600	------	8,200	9,800	10,600	11,500	11,000	11,000	11,300	12,000	------	------	------
PHYSICS	12,000	7,400	8,800	10,600	13,100	14,500	15,000	14,500	15,000	14,400	11,300	10,000	------
MATHEMATICS	11,000	7,200	8,900	10,500	12,900	13,700	13,500	13,000	12,100	12,000	10,500	9,000	------
AGRICULTURAL SCIENCES	9,200	5,800	6,400	7,700	9,000	10,000	10,900	11,600	12,300	12,800	12,700	------	8,700
BIOLOGICAL SCIENCES	10,700	5,000	6,600	8,400	10,400	12,000	13,000	13,800	14,000	13,500	13,000	13,000	8,400
PSYCHOLOGY	10,300	------	7,600	9,000	10,300	11,000	11,700	11,800	11,500	11,500	10,800	10,000	------
STATISTICS	12,000	------	8,700	10,400	12,000	13,000	14,000	14,000	14,000	13,000	------	------	------
ECONOMICS	12,000	7,800	8,400	9,700	11,500	13,000	14,800	15,000	15,000	15,000	14,500	12,000	------
SOCIOLOGY	10,100	------	7,800	8,500	9,600	10,500	11,000	12,000	12,500	11,500	11,800	------	------
LINGUISTICS	9,000	------	6,900	7,500	8,500	9,300	10,500	12,000	11,600	12,400	------	------	------
OTHER FIELDS	11,100	7,200	8,300	9,900	11,900	13,200	14,000	14,100	13,400	14,000	12,600	12,500	------

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 16.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD AND TYPE OF EMPLOYER, 1964

SCIENTIFIC AND TECHNICAL FIELD	TOTAL	TYPE OF EMPLOYER							NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER	
ALL FIELDS	11,000	9,600	11,000	9,000	12,000	12,000	15,000	11,000	11,000
CHEMISTRY	11,000	9,300	10,900	8,700	11,000	11,700	15,000	10,900	12,000
EARTH SCIENCES	10,300	8,800	11,000	8,700	10,000	11,000	12,000	9,600	------
METEOROLOGY	10,600	10,500	10,600	10,000	12,100	11,000	------	------	------
PHYSICS	12,000	9,600	12,000	9,100	13,000	13,500	15,000	------	------
MATHEMATICS	11,000	8,700	12,100	9,500	14,000	13,000	20,000	11,500	------
AGRICULTURAL SCIENCES	9,200	10,200	9,300	7,300	10,500	9,000	9,000	10,000	10,100
BIOLOGICAL SCIENCES	10,700	10,000	11,000	9,900	12,800	12,500	18,000	11,000	11,500
PSYCHOLOGY	10,300	9,700	12,000	9,400	10,300	14,100	17,000	10,400	10,400
STATISTICS	12,000	10,400	13,000	9,900	12,000	12,000	------	10,500	------
ECONOMICS	12,000	10,100	13,700	11,700	15,000	14,400	20,000	14,300	14,000
SOCIOLOGY	10,100	10,000	12,900	10,700	12,000	14,000	------	------	------
LINGUISTICS	9,000	9,000	10,700	------	5,000	12,000	------	------	------
OTHER FIELDS	11,100	8,300	12,100	10,000	13,200	12,000	15,000	10,000	------

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 17.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD AND WORK ACTIVITY, 1964

SCIENTIFIC AND TECHNICAL FIELD	TOTAL	WORK ACTIVITY								NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER	
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D				
ALL FIELDS	11,000	11,000	11,000	11,000	14,500	15,500	8,900	9,800	10,500	11,200
CHEMISTRY	11,000	10,900	11,000	11,000	15,000	15,200	8,900	9,500	11,000	11,300
EARTH SCIENCES	10,300	10,400	10,300	10,500	14,100	14,000	8,500	9,300	10,000	10,800
METEOROLOGY	10,600	11,000	11,200	11,000	12,500	14,500	10,000	9,300	9,800	11,000
PHYSICS	12,000	12,000	12,000	12,000	17,000	17,300	8,700	10,000	12,000	13,000
MATHEMATICS	11,000	11,800	11,000	12,400	15,500	16,000	8,200	10,600	12,000	11,000
AGRICULTURAL SCIENCES	9,200	9,500	9,500	9,500	9,000	11,400	9,800	7,800	8,800	8,900
BIOLOGICAL SCIENCES	10,700	11,000	10,600	11,300	14,900	15,500	9,000	8,400	11,900	12,000
PSYCHOLOGY	10,300	10,000	10,500	9,800	13,000	14,500	9,300	------	10,200	10,200
STATISTICS	12,000	11,800	11,500	12,000	14,200	14,600	10,000	10,600	12,000	10,800
ECONOMICS	12,000	11,400	11,000	11,500	16,100	16,200	9,700	11,700	13,000	12,500
SOCIOLOGY	10,100	11,000	11,000	11,500	13,500	13,500	9,100	------	11,000	11,000
LINGUISTICS	9,000	9,600	10,000	8,400	11,200	12,000	8,500	------	8,000	9,000
OTHER FIELDS	11,100	11,000	11,000	11,500	15,000	16,000	7,900	10,000	11,000	12,000

(A) INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B) INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

NOTE—TEACHING SALARIES REFLECT A COMPOSITE OF ACADEMIC AND CALENDAR YEAR SALARIES FOR SECONDARY SCHOOLS AND INSTITUTIONS OF HIGHER EDUCATION. NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 18.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD AND YEARS OF PROFESSIONAL EXPERIENCE, 1964

SCIENTIFIC AND TECHNICAL FIELD	TOTAL	YEARS OF PROFESSIONAL EXPERIENCE						NO REPORT OF YEARS OF EXPERIENCE
		1 YEAR	2-4 YEARS	5-9 YEARS	10-14 YEARS	15-19 YEARS	20 OR MORE YEARS	
ALL FIELDS	11,000	7,400	8,000	9,600	11,500	12,500	14,000	10,900
CHEMISTRY	11,000	7,200	9,000	9,600	11,400	12,200	14,000	11,000
EARTH SCIENCES	10,300	6,900	7,500	9,000	10,800	12,000	14,100	10,000
METEOROLOGY	10,600	7,500	8,200	9,800	10,600	10,800	12,000	11,000
PHYSICS	12,000	8,100	8,600	10,700	13,500	14,600	15,200	9,900
MATHEMATICS	11,000	8,000	8,500	10,500	13,300	14,400	14,000	11,000
AGRICULTURAL SCIENCES	9,200	6,200	6,600	8,000	9,300	10,300	12,000	9,000
BIOLOGICAL SCIENCES	10,700	7,200	7,500	9,200	11,000	12,400	14,100	11,000
PSYCHOLOGY	10,300	7,500	8,100	9,400	11,000	12,000	12,200	10,700
STATISTICS	12,000	------	8,800	10,300	12,000	13,500	14,500	12,000
ECONOMICS	12,000	7,800	8,400	10,000	12,000	13,500	16,000	12,000
SOCIOLOGY	10,100	7,500	8,100	9,000	10,200	11,200	12,500	10,500
LINGUISTICS	9,000	6,500	7,100	8,000	9,200	10,000	12,400	10,200
OTHER FIELDS	11,100	7,400	8,000	9,600	12,000	13,200	14,700	11,400

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 19.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY HIGHEST DEGREE AND TYPE OF EMPLOYER, 1964

HIGHEST DEGREE	TOTAL	TYPE OF EMPLOYER							NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER	
ALL DEGREES	11,000	9,600	11,000	9,000	12,000	12,000	15,000	11,000	11,000
PH.D.	12,000	10,500	12,900	10,900	13,000	15,000	18,000	12,200	12,000
PROFESSIONAL MEDICAL	15,500	15,000	17,000	16,100	16,000	18,000	20,000	17,000	------
MASTER'S	10,000	7,700	10,900	8,400	10,400	12,000	15,000	10,300	9,200
BACHELOR'S	10,000	6,600	10,000	7,800	9,900	10,500	12,000	9,900	10,200
LESS THAN BACHELOR'S	10,300	8,300	9,800	9,200	10,000	11,000	14,000	------	------
NO REPORT	10,800	9,000	10,000	9,100	11,000	11,500	------	------	------

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 20.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY WORK ACTIVITY AND TYPE OF EMPLOYER, 1964

WORK ACTIVITY	TOTAL	TYPE OF EMPLOYER							NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER	
ALL ACTIVITIES	11,000	9,600	11,000	9,000	12,000	12,000	15,000	11,000	11,000
RESEARCH AND DEVELOPMENT (A)	11,000	10,200	10,600	8,700	11,500	11,400	15,000	10,400	10,700
BASIC RESEARCH	11,000	10,000	10,700	9,000	11,000	12,300	14,700	10,000	11,700
APPLIED RESEARCH	11,000	10,400	10,600	8,500	12,000	11,500	15,000	10,800	10,300
MANAGEMENT OR ADMINISTRATION (B)	14,500	14,000	13,000	10,000	15,600	15,500	15,000	13,500	14,100
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	15,500	14,500	14,500	10,600	17,000	16,000	19,000	14,500	15,000
TEACHING	8,900	8,800	10,000	8,500	12,000	10,500	------	8,000	9,000
PRODUCTION AND INSPECTION	9,800	8,700	9,500	7,700	10,000	10,000	12,000	9,900	------
OTHER	10,500	9,600	10,300	8,900	10,000	11,000	16,000	11,000	10,000
NO REPORT	11,200	10,800	10,600	8,600	12,000	12,000	16,000	12,000	11,500

(A) INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B) INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

NOTE—TEACHING SALARIES REFLECT A COMPOSITE OF ACADEMIC AND CALENDAR YEAR SALARIES FOR SECONDARY SCHOOLS AND INSTITUTIONS OF HIGHER EDUCATION. NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 21.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY YEARS OF PROFESSIONAL EXPERIENCE AND TYPE OF EMPLOYER, 1964

YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	TYPE OF EMPLOYER							NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER	
ALL YEARS	11,000	9,600	11,000	9,000	12,000	12,000	15,000	11,000	11,000
1 YEAR	7,400	7,000	7,000	6,100	7,200	7,600	------	7,200	------
2 TO 4	8,000	7,500	8,000	6,800	8,400	8,600	9,000	8,000	8,400
5 TO 9	9,600	8,500	9,900	8,200	10,600	10,500	13,000	9,600	9,500
10 TO 14	11,500	10,100	11,500	9,500	13,000	12,300	15,000	11,500	11,700
15 TO 19	12,500	11,000	12,100	9,900	14,400	13,800	16,000	13,000	12,500
20 OR MORE	14,000	12,300	14,000	11,000	16,000	15,300	18,000	14,000	13,900
NO REPORT	10,900	9,500	11,300	9,300	11,000	11,800	15,000	10,000	------

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 22.—NUMBER OF SCIENTISTS, BY SELECTED STATES AND FIELD, 1964

STATE	TOTAL	SCIENTIFIC AND TECHNICAL FIELD												
		CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELDS
ALL STATES	223,854	63,053	17,907	5,510	26,698	17,411	9,526	27,135	16,804	2,843	12,143	2,703	1,351	20,770
SELECTED STATES	139,437	41,513	9,062	2,726	18,808	11,509	2,988	15,510	11,183	1,978	8,054	1,652	838	13,616
CALIFORNIA	26,645	5,620	2,036	630	4,536	3,167	825	2,827	2,321	297	1,171	254	156	2,805
NEW YORK	24,510	7,015	675	348	3,267	2,143	310	2,965	2,713	400	1,793	372	162	2,347
PENNSYLVANIA	12,813	4,898	500	97	1,572	805	256	1,428	992	133	641	135	59	1,297
NEW JERSEY	11,844	5,819	156	87	1,486	775	100	796	684	136	427	61	24	1,293
ILLINOIS	11,537	3,888	496	238	1,253	787	229	1,490	976	151	816	163	81	969
TEXAS	10,660	2,509	3,231	264	793	601	313	866	466	86	343	67	54	1,067
OHIO	10,135	4,124	412	104	1,150	625	176	937	729	122	510	128	35	1,083
MASSACHUSETTS	9,540	2,577	358	284	1,978	901	84	1,068	721	92	470	129	63	815
MICHIGAN	7,573	2,435	297	100	724	510	304	952	712	82	485	137	82	753
DIST. OF COL.	7,175	977	666	323	1,043	515	184	669	495	297	1,206	128	106	566
MARYLAND	7,005	1,651	235	251	1,006	680	207	1,512	374	182	192	78	16	621
OTHER LOCATIONS	84,417	21,540	8,845	2,784	7,890	5,902	6,538	11,625	5,621	865	4,089	1,051	513	7,154

NOTE - INCLUDES STATES WITH 5,000 OR MORE SCIENTISTS REPORTING TO THE NATIONAL REGISTER IN 1964.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 23.—NUMBER OF SCIENTISTS, BY SELECTED STATES AND HIGHEST DEGREE, 1964

STATE	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ALL STATES	223,854	79,372	5,925	61,222	72,364	2,878	2,093
SELECTED STATES	139,437	49,748	4,024	37,992	44,545	1,723	1,405
CALIFORNIA	26,645	9,556	535	7,142	8,716	399	297
NEW YORK	24,510	9,222	1,051	6,697	6,986	298	256
PENNSYLVANIA	12,813	4,494	398	3,370	4,309	134	108
NEW JERSEY	11,844	4,277	121	3,070	4,093	143	140
ILLINOIS	11,537	4,345	298	3,301	3,365	119	109
TEXAS	10,660	2,514	151	2,975	4,728	186	106
OHIO	10,135	3,257	236	2,731	3,719	88	104
MASSACHUSETTS	9,540	3,782	405	2,558	2,583	119	93
MICHIGAN	7,573	2,870	142	2,369	2,048	81	63
DISTRICT OF COLUMBIA	7,175	2,814	184	2,111	1,910	85	71
MARYLAND	7,005	2,617	503	1,668	2,088	71	58
OTHER LOCATIONS	84,417	29,624	1,901	23,230	27,819	1,155	688

NOTE - INCLUDES STATES WITH 5,000 OR MORE SCIENTISTS REPORTING TO THE NATIONAL REGISTER IN 1964.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 24.—NUMBER OF SCIENTISTS, BY SELECTED STATES AND TYPE OF EMPLOYER, 1964

STATE	TOTAL	TYPE OF EMPLOYER								NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER		
ALL STATES	223,854	77,727	23,405	7,472	5,522	8,722	84,421	4,277	1,434	9,617	1,257
SELECTED STATES	139,437	43,774	14,432	4,064	2,918	6,697	56,890	2,970	885	6,079	728
CALIFORNIA	26,645	8,966	2,186	1,135	570	1,391	10,195	694	119	1,244	145
NEW YORK	24,510	8,375	649	904	315	1,717	10,348	721	208	1,125	148
PENNSYLVANIA	12,813	4,394	608	322	51	582	5,958	171	73	588	66
NEW JERSEY	11,844	1,884	448	170	74	235	8,242	194	43	511	43
ILLINOIS	11,537	4,978	461	401	133	560	4,149	211	74	505	65
TEXAS	10,660	2,610	609	184	307	165	5,811	499	49	374	52
OHIO	10,135	3,131	934	280	200	559	4,364	123	81	407	56
MASSACHUSETTS	9,540	3,944	630	166	153	666	3,152	121	64	586	58
MICHIGAN	7,573	3,311	202	286	53	182	3,049	99	26	332	33
DISTRICT OF COLUMBIA	7,175	639	4,766	80	400	522	393	82	123	143	27
MARYLAND	7,005	1,542	2,939	136	662	118	1,229	55	25	264	35
OTHER LOCATIONS	84,417	33,953	8,973	3,408	2,604	2,025	27,531	1,307	549	3,538	529

NOTE - INCLUDES STATES WITH 5,000 OR MORE SCIENTISTS REPORTING TO THE NATIONAL REGISTER IN 1964.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 25.—NUMBER OF SCIENTISTS, BY SELECTED STATES AND WORK ACTIVITY, 1964

STATE	TOTAL	WORK ACTIVITY								NOT EMPLOYED	NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER		
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D					
ALL STATES	223,854	77,699	35,781	30,280	46,255	24,568	41,209	16,582	26,301	9,617	6,191
SELECTED STATES	139,437	51,864	23,421	20,096	29,428	16,965	22,444	10,614	15,345	6,079	3,663
CALIFORNIA	26,645	10,558	4,717	3,902	5,375	3,130	4,023	1,624	3,097	1,244	724
NEW YORK	24,510	8,479	3,944	3,090	5,069	2,616	4,444	1,840	2,899	1,125	654
PENNSYLVANIA	12,813	4,863	2,052	1,933	2,517	1,454	2,403	1,095	1,045	588	302
NEW JERSEY	11,844	5,136	1,712	2,297	2,818	1,894	1,037	1,273	801	511	268
ILLINOIS	11,537	4,074	2,092	1,550	2,222	1,200	2,400	959	1,065	505	312
TEXAS	10,660	2,559	990	1,154	2,020	809	1,552	1,257	2,580	374	318
OHIO	10,135	3,567	1,344	1,529	2,103	1,288	1,962	926	893	407	277
MASSACHUSETTS	9,540	4,121	2,311	1,272	1,615	1,016	1,786	460	726	586	246
MICHIGAN	7,573	2,656	1,218	1,058	1,445	788	1,768	576	617	332	179
DISTRICT OF COLUMBIA	7,175	2,504	1,225	1,134	2,638	1,621	409	243	1,036	143	202
MARYLAND	7,005	3,347	1,816	1,177	1,606	1,149	660	361	586	264	181
OTHER LOCATIONS	84,417	25,835	12,360	10,184	16,827	7,603	18,765	5,968	10,956	3,538	2,528

(A)INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

NOTE - INCLUDES STATES WITH 5,000 OR MORE SCIENTISTS REPORTING TO THE NATIONAL REGISTER IN 1964.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 26.—NUMBER AND MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STATE, 1964

STATE	TOTAL	MEDIAN ANNUAL SALARY	STATE	TOTAL	MEDIAN ANNUAL SALARY
ALL LOCATIONS	223,854	11,000	MONTANA	797	9,000
			NEBRASKA	1,118	9,400
ALABAMA	1,887	10,300	NEVADA	430	9,800
ALASKA	452	10,900	NEW HAMPSHIRE	650	9,500
ARIZONA	1,768	9,800	NEW JERSEY	11,844	12,000
ARKANSAS	770	9,300	NEW MEXICO	2,023	11,900
CALIFORNIA	26,645	12,000	NEW YORK	24,510	11,800
COLORADO	3,656	10,500	NORTH CAROLINA	3,118	10,000
CONNECTICUT	4,149	10,900	NORTH DAKOTA	460	8,700
DELAWARE	2,387	13,500	OHIO	10,135	10,600
DISTRICT OF COLUMBIA	7,175	13,000	OKLAHOMA	3,112	10,800
FLORIDA	3,708	10,100	OREGON	2,253	9,200
GEORGIA	2,238	10,000	PENNSYLVANIA	12,813	11,000
HAWAII	742	10,000	RHODE ISLAND	895	10,000
IDAHO	814	9,000	SOUTH CAROLINA	1,203	9,900
ILLINOIS	11,537	10,800	SOUTH DAKOTA	463	8,600
INDIANA	4,628	10,200	TENNESSEE	3,108	10,800
IOWA	2,351	10,000	TEXAS	10,660	10,300
KANSAS	2,088	9,300	UTAH	1,570	10,000
KENTUCKY	1,545	9,800	VERMONT	343	8,600
LOUISIANA	3,172	10,000	VIRGINIA	3,741	10,600
MAINE	589	8,800	WASHINGTON	3,717	10,000
MARYLAND	7,005	11,700	WEST VIRGINIA	1,513	10,000
MASSACHUSETTS	9,540	11,000	WISCONSIN	3,912	9,800
MICHIGAN	7,573	10,800	WYOMING	717	9,500
MINNESOTA	3,811	10,500	PUERTO RICO	355	9,500
MISSISSIPPI	978	9,300	FOREIGN	3,464	11,300
MISSOURI	3,722	10,300			

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 27.—NUMBER OF SCIENTISTS, BY SELECTED STANDARD METROPOLITAN STATISTICAL AREAS AND FIELD, 1964

METROPOLITAN AREA	TOTAL	SCIENTIFIC AND TECHNICAL FIELD					
		CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES
ALL LOCATIONS	223,854	63,053	17,907	5,510	26,698	17,411	9,526
SELECTED METROPOLITAN AREAS	91,388	26,729	5,280	1,959	12,547	8,144	1,014
NEW YORK, N.Y	14,870	3,689	416	280	1,627	1,424	63
WASHINGTON, D.C.-MD.-VA	11,788	1,787	896	540	1,696	1,109	350
LOS ANGELES-LONG BEACH, CALIF	9,390	1,756	657	172	1,686	1,523	42
CHICAGO, ILL	7,615	2,831	198	127	828	494	39
BOSTON, MASS	7,230	1,810	228	226	1,708	719	28
SAN FRANCISCO-OAKLAND, CALIF	6,342	1,827	431	169	992	483	114
PHILADELPHIA, PA.-N.J	6,197	2,565	60	43	588	467	60
NEWARK, N.J	4,462	2,340	34	11	562	273	3
PITTSBURGH, PA	2,932	1,154	155	10	478	164	11
MINNEAPOLIS-ST. PAUL, MINN	2,898	924	106	39	278	262	154
SAN JOSE, CALIF	2,761	470	122	49	657	429	14
HOUSTON, TEX	2,642	671	944	19	164	148	17
DENVER, COLO	2,609	415	834	105	340	135	72
WILMINGTON, DEL.-N.J.-MD	2,594	1,757	17	4	110	40	11
CLEVELAND, OHIO	2,550	1,091	37	20	411	139	2
DETROIT, MICH	2,256	813	48	29	232	197	16
ST. LOUIS, MO.-ILL	2,252	829	97	116	100	138	18
OTHER LOCATIONS	132,466	36,324	12,627	3,551	14,151	9,267	8,512

METROPOLITAN AREA	SCIENTIFIC AND TECHNICAL FIELD						
	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELDS
ALL LOCATIONS	27,135	16,804	2,843	12,143	2,703	1,351	20,770
SELECTED METROPOLITAN AREAS	10,033	7,617	1,418	6,126	1,060	546	8,915
NEW YORK, N.Y	1,901	2,027	260	1,417	247	104	1,415
WASHINGTON, D.C.-MD.-VA	1,632	771	442	1,357	179	122	907
LOS ANGELES-LONG BEACH, CALIF	794	952	109	454	83	58	1,104
CHICAGO, ILL	989	647	100	526	96	48	692
BOSTON, MASS	821	549	76	357	100	55	553
SAN FRANCISCO-OAKLAND, CALIF	802	435	65	334	82	51	557
PHILADELPHIA, PA.-N.J	871	439	47	324	54	38	641
NEWARK, N.J	274	225	40	173	16	2	509
PITTSBURGH, PA	210	202	46	138	30	7	327
MINNEAPOLIS-ST. PAUL, MINN	410	263	50	158	30	10	214
SAN JOSE, CALIF	209	238	54	118	27	16	348
HOUSTON, TEX	141	85	15	107	8	7	316
DENVER, COLO	206	174	22	60	17	8	221
WILMINGTON, DEL.-N.J.-MD	85	60	22	151	5	2	330
CLEVELAND, OHIO	233	164	25	152	24	8	244
DETROIT, MICH	208	240	24	154	26	7	262
ST. LOUIS, MO.-ILL	247	146	21	146	36	3	275
OTHER LOCATIONS	17,102	9,187	1,425	6,017	1,643	805	11,855

NOTE - INCLUDES METROPOLITAN AREAS WITH 2,000 OR MORE SCIENTISTS REPORTING TO THE NATIONAL REGISTER IN 1964.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 28.—NUMBER OF SCIENTISTS, BY SELECTED STANDARD METROPOLITAN STATISTICAL AREAS AND HIGHEST DEGREE, 1964

METROPOLITAN AREA	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ALL LOCATIONS	223,854	79,372	5,925	61,222	72,364	2,878	2,093
SELECTED METROPOLITAN AREAS	91,388	33,785	3,258	24,240	28,106	1,070	929
NEW YORK, N.Y	14,870	5,469	802	4,188	4,042	198	171
WASHINGTON, D.C.-MD.-VA	11,788	4,673	486	3,278	3,121	128	102
LOS ANGELES-LONG BEACH, CALIF	9,390	3,255	214	2,641	3,019	139	122
CHICAGO, ILL	7,615	2,744	273	2,085	2,344	86	83
BOSTON, MASS	7,230	2,947	384	1,889	1,862	83	65
SAN FRANCISCO-OAKLAND, CALIF	6,342	2,511	179	1,505	2,015	70	62
PHILADELPHIA, PA.-N.J	6,197	2,150	309	1,499	2,095	85	59
NEWARK, N.J	4,462	1,685	45	1,120	1,503	51	58
PITTSBURGH, PA	2,932	1,103	58	705	1,028	17	21
MINNEAPOLIS-ST. PAUL, MINN	2,898	1,135	75	693	952	23	20
SAN JOSE, CALIF	2,761	1,143	59	740	765	27	27
HOUSTON, TEX	2,642	597	41	676	1,256	39	33
DENVER, COLO	2,609	812	51	730	967	28	21
WILMINGTON, DEL.-N.J.-MD	2,594	1,364	11	484	715	7	13
CLEVELAND, OHIO	2,550	773	116	690	925	22	24
DETROIT, MICH	2,256	693	48	726	725	36	28
ST. LOUIS, MO.-ILL	2,252	731	107	591	772	31	20
OTHER LOCATIONS	132,466	45,587	2,667	36,982	44,258	1,808	1,164

NOTE - INCLUDES METROPOLITAN AREAS WITH 2,000 OR MORE SCIENTISTS REPORTING TO THE NATIONAL REGISTER IN 1964.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 29.—NUMBER OF SCIENTISTS, BY SELECTED STANDARD METROPOLITAN STATISTICAL AREAS AND TYPE OF EMPLOYER 1964

METROPOLITAN AREA	TOTAL	TYPE OF EMPLOYER								NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF EMPLOYED	OTHER		
ALL LOCATIONS	223,854	77,727	23,405	7,472	5,522	8,722	84,421	4,277	1,434	9,617	1,257
SELECTED METROPOLITAN AREAS	91,388	25,633	11,428	2,050	1,765	5,536	37,942	2,058	699	3,822	485
NEW YORK, N.Y	14,870	4,655	423	494	247	1,498	5,954	639	182	673	105
WASHINGTON, D.C.-MD.-VA	11,788	1,386	7,011	127	862	696	1,095	117	144	298	52
LOS ANGELES-LONG BEACH, CALIF	9,390	2,792	287	292	55	789	4,367	315	44	395	54
CHICAGO, ILL	7,615	2,761	210	177	37	531	3,320	161	64	312	42
BOSTON, MASS	7,230	3,036	537	125	100	516	2,278	90	49	457	42
SAN FRANCISCO-OAKLAND, CALIF	6,342	2,660	616	242	199	391	1,734	136	29	306	29
PHILADELPHIA, PA.-N.J	6,197	1,691	345	108	39	340	3,266	93	36	253	26
NEWARK, N.J	4,462	404	171	23	11	51	3,523	83	11	172	13
PITTSBURGH, PA	2,932	876	111	25	2	185	1,548	31	14	129	11
MINNEAPOLIS-ST. PAUL, MINN	2,898	1,172	162	103	5	43	1,249	23	12	109	20
SAN JOSE, CALIF	2,761	907	265	57	14	54	1,225	45	8	166	20
HOUSTON, TEX	2,642	432	109	15	18	31	1,827	113	5	81	11
DENVER, COLO	2,609	658	683	81	59	133	761	88	18	109	19
WILMINGTON, DEL.-N.J.-MD	2,594	202	20	10	4	13	2,236	8	2	93	6
CLEVELAND, OHIO	2,550	686	301	42	7	104	1,241	44	19	90	16
DETROIT, MICH	2,256	659	53	85	14	122	1,171	37	12	94	9
ST. LOUIS, MO.-ILL	2,252	656	124	44	92	39	1,147	35	20	85	10
OTHER LOCATIONS	132,466	52,094	11,977	5,422	3,757	3,186	46,479	2,219	735	5,795	772

NOTE - INCLUDES METROPOLITAN AREAS WITH 2,000 OR MORE SCIENTISTS REPORTING TO THE NATIONAL REGISTER IN 1964.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 30.—NUMBER OF SCIENTISTS, BY SELECTED STANDARD METROPOLITAN STATISTICAL AREAS AND WORK ACTIVITY, 1964

METROPOLITAN AREA	TOTAL	WORK ACTIVITY									
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER	NOT EMPLOYED	NO REPORT OF WORK ACTIVITY
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D					
ALL LOCATIONS	223,854	77,699	35,781	30,280	46,255	24,568	41,209	16,582	26,301	9,617	6,191
SELECTED METROPOLITAN AREAS	91,388	35,831	16,797	13,635	20,456	12,001	11,765	6,696	10,450	3,822	2,368
NEW YORK, N.Y	14,870	4,637	2,318	1,649	3,367	1,590	2,374	1,147	2,237	673	435
WASHINGTON, D.C.-MD.-VA	11,788	4,801	2,458	1,980	3,811	2,510	684	394	1,474	298	326
LOS ANGELES-LONG BEACH, CALIF	9,390	3,584	1,434	1,288	2,032	1,250	1,368	629	1,136	395	246
CHICAGO, ILL	7,615	2,901	1,393	1,152	1,608	917	1,147	690	764	312	193
BOSTON, MASS	7,230	3,466	2,024	1,034	1,181	777	1,087	290	568	457	181
SAN FRANCISCO-OAKLAND, CALIF	6,342	2,850	1,564	979	1,116	632	829	380	691	306	170
PHILADELPHIA, PA.-N.J	6,197	2,518	1,035	1,020	1,304	791	896	573	517	253	136
NEWARK, N.J	4,462	1,993	645	896	1,127	771	317	472	293	172	88
PITTSBURGH, PA	2,932	1,258	573	468	588	368	402	246	255	129	54
MINNEAPOLIS-ST PAUL, MINN	2,898	1,180	537	444	572	351	508	201	234	109	94
SAN JOSE, CALIF	2,761	1,298	640	402	516	357	396	127	192	166	66
HOUSTON, TEX	2,642	682	249	306	598	247	211	343	660	81	67
DENVER, COLO	2,609	907	513	312	440	206	378	142	559	109	74
WILMINGTON, DEL.-N.J.-MD	2,594	1,166	386	581	660	413	90	309	216	93	60
CLEVELAND, OHIO	2,550	1,084	451	458	508	314	329	238	228	90	73
DETROIT, MICH	2,256	747	274	337	483	260	431	235	210	94	51
ST. LOUIS, MO.-ILL	2,252	759	303	329	540	247	318	280	216	85	54
OTHER LOCATIONS	132,466	41,868	18,984	16,645	25,799	12,567	29,444	9,886	15,851	5,795	3,823

(A)INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

NOTE - INCLUDES METROPOLITAN AREAS WITH 2,000 OR MORE SCIENTISTS REPORTING TO THE NATIONAL REGISTER IN 1964.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 31.—NUMBER AND MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS. BY STANDARD METROPOLITAN STATISTICAL AREA, 1964

LOCATION	TOTAL	MEDIAN ANNUAL SALARY
ALL LOCATIONS	223,854	11,000
STANDARD METROPOLITAN STATISTICAL AREAS	166,753	11,300
ABILENE, TEX	156	9,000
AKRON, OHIO	983	11,000
ALBANY, GA	32	------
ALBANY-SCHENECTADY-TROY, N.Y	1,407	12,000
ALBUQUERQUE, N.MEX	655	12,300
ALLENTOWN-BETHLEHEM-EASTON, PA.-N.J	587	10,200
ALTOONA, PA	16	------
AMARILLO, TEX	317	9,600
ANAHEIM-SANTA ANA-GARDEN GROVE, CALIF	1,160	12,800
ANN ARBOR, MICH	1,547	11,600
ASHEVILLE, N.C	142	9,600
ATLANTA, GA	1,053	10,100
ATLANTIC CITY, N.J	60	12,100
AUGUSTA, GA.-S.C	304	11,100
AUSTIN, TEX	827	9,600
BAKERSFIELD, CALIF	332	10,500
BALTIMORE, MD	1,879	11,000
BATON ROUGE, LA	665	11,000
BAY CITY, MICH	70	11,000
BEAUMONT-PORT ARTHUR, TEX	412	10,500
BILLINGS, MONT	113	9,700
BINGHAMPTON, N.Y.-PA	349	11,800
BIRMINGHAM, ALA	275	11,300
BOISE CITY, IDAHO	-------	------
BOSTON, MASS	7,230	11,500
BRIDGEPORT, CONN	201	10,000
BROCKTON, MASS	44	9,800
BROWNSVILLE-HARLINGEN-SAN BENITO, TEX	34	9,300
BUFFALO, N.Y	1,599	10,800
CANTON, OHIO	104	9,700
CEDAR RAPIDS, IOWA	102	9,600
CHAMPAIGN-URBANA, ILL	1,495	11,000
CHARLESTON, S.C	157	9,800
CHARLESTON, W.VA	565	11,000
CHARLOTTE, N.C	224	10,000
CHATTANOOGA, TENN.-GA	169	9,700
CHICAGO, ILL	7,615	11,200
CINCINNATI, OHIO-KY.-IND	1,528	10,700
CLEVELAND, OHIO	2,550	11,000
COLORADO SPRINGS, COLO	167	10,300
COLUMBIA, S.C	184	9,800
COLUMBUS, GA.-ALA	47	10,600
COLUMBUS, OHIO	1,760	11,000
CORPUS CHRISTI, TEX	432	10,000
DALLAS, TEX	1,399	11,700
DAVENPORT-ROCK ISLAND-MOLINE, IOWA-ILL	124	9,200
DAYTON, OHIO	997	11,000
DECATUR, ILL	117	10,800
DENVER, COLO	2,609	11,000
DES MOINES, IOWA	171	10,000
DETROIT, MICH	2,256	10,900
DUBUQUE, IOWA	51	7,900
DULUTH-SUPERIOR, MINN.-WIS	162	8,400
DURHAM, N.C	648	12,000
EL PASO, TEX	149	9,600
ERIE, PA	127	10,000
EUGENE, OREG	338	9,300
EVANSVILLE, IND.-KY	208	10,000
FALL RIVER, MASS.-R.I	30	------
FARGO-MOORHEAD, N.DAK.-MINN	174	9,000
FITCHBURG-LEOMINSTER, MASS	31	10,000
FLINT, MICH	117	9,900
FORT LAUDERDALE-HOLLYWOOD, FLA	75	10,300
FORT SMITH, ARK.-OKLA	18	------
FORT WAYNE, IND	178	9,800
FORT WORTH, TEX	442	10,800
FRESNO, CALIF	208	9,800
GADSDEN, ALA	3	------
GALVESTON-TEXAS CITY, TEX	244	11,500
GARY-HAMMOND-EAST CHICAGO, IND	426	12,100
GRAND RAPIDS, MICH	178	9,000
GREAT FALLS, MONT	56	9,600
GREEN BAY, WIS	54	9,000
GREENSBORO-HIGH POINT, N.C	165	9,200
GREENVILLE, S.C	66	8,000
HAMILTON-MIDDLETOWN, OHIO	157	9,600
HARRISBURG, PA	220	9,300
HARTFORD, CONN	747	10,900
HONOLULU, HAWAII	590	10,300
HOUSTON, TEX	2,642	12,000
HUNTINGTON-ASHLAND, W.VA.-KY.-OHIO	161	9,000
HUNTSVILLE, ALA	500	11,700
INDIANAPOLIS, IND	905	10,500
JACKSON, MICH	41	9,300
JACKSON, MISS	314	10,100
JACKSONVILLE, FLA	147	9,800
JERSEY CITY, N.J	548	10,800
JOHNSTOWN, PA	42	7,700
KALAMAZOO, MICH	405	12,000
KANSAS CITY, MO.-KANS	775	10,300
KENOSHA, WIS	11	------
KNOXVILLE, TENN	1,345	12,000
LAFAYETTE, LA	277	9,900
LAKE CHARLES, LA	136	9,600
LANCASTER, PA	310	10,800
LANSING, MICH	995	11,000
LAREDO, TEX	12	------
LAS VEGAS, NEV	147	10,000
LAWRENCE-HAVERHILL, MASS.-N.H	86	10,100
LAWTON, OKLA	25	------
LEWISTON-AUBURN, MAINE	14	------
LEXINGTON, KY	449	10,800
LIMA, OHIO	34	8,500
LINCOLN, NEBR	514	9,700
LITTLE ROCK-NORTH LITTLE ROCK, ARK	194	10,500
LORIAN-ELYRIA, OHIO	140	10,000
LOS ANGELES-LONG BEACH, CALIF	9,390	12,500
LOUISVILLE, KY.-IND	524	10,500
LOWELL, MASS	110	10,000
LUBBOCK, TEX	215	9,300
LYNCHBURG, VA	91	9,600
MACON, GA	54	8,600
MADISON, WIS	1,754	10,500
MANCHESTER, N.H	19	------
MAYAGUEZ, P.R	62	9,600
MEMPHIS, TENN.-ARK	382	10,100
MERIDEN, CONN	6	------
MIAMI, FLA	545	10,000
MIDLAND, TEX	608	10,600
MILWAUKEE, WIS	878	10,000
MINNEAPOLIS-ST. PAUL, MINN	2,898	11,000
MOBILE, ALA	107	10,100
MONROE, LA	77	8,400
MONTGOMERY, ALA	89	8,700
MUNCIE, IND	91	8,800
MUSKEGON-MUSKEGON HEIGHTS, MICH	59	10,700
NASHVILLE, TENN	478	10,000
NEW BEDFORD, MASS	18	------
NEW BRITAIN, CONN	39	9,000
NEW HAVEN, CONN	1,190	10,300
NEW LONDON-GROTON-NORWICH, CONN	281	11,000
NEW ORLEANS, LA	1,278	10,300
NEW YORK, N.Y	14,870	12,000
NEWARK, N.J	4,462	12,100
NEWPORT NEWS-HAMPTON, VA	225	10,300
NORFOLK-PORTSMOUTH, VA	209	9,000
NORWALK, CONN	202	12,200
ODESSA, TEX	49	10,000
OGDEN, UTAH	89	9,600
OKLAHOMA CITY, OKLA	939	10,200
OMAHA, NEBR.-IOWA	371	10,500
ORLANDO, FLA	290	11,000
PATERSON-CLIFTON-PASSAIC, N.J	1,242	11,300
PENSACOLA, FLA	103	10,000
PEORIA, ILL	263	10,300
PHILADELPHIA, PA.-N.J	6,197	11,300
PHOENIX, ARIZ	687	10,000
PITTSBURGH, PA	2,932	11,900
PITTSFIELD, MASS	94	11,600
PONCE, P.R	19	------
PORTLAND, MAINE	69	8,000
PORTLAND, OREG.-WASH	732	10,000
PROVIDENCE-PAWTUCKET-WARWICK, R.I.-MASS	676	9,600
PROVO-OREM, UTAH	196	8,800
PUEBLO, COLO	53	8,400
RACINE, WIS	120	10,000
RALEIGH, N.C	601	10,000
READING, PA	133	9,000
RENO, NEV	180	9,800
RICHMOND, VA	541	10,600
ROANOKE, VA	46	9,400
ROCHESTER, N.Y	1,752	12,000
ROCKFORD, ILL	51	9,800
SACRAMENTO, CALIF	1,396	11,000
SAGINAW, MICH	22	------
ST. JOSEPH, MO	20	------
ST. LOUIS, MO.-ILL	2,252	11,200
SALT LAKE CITY, UTAH	796	10,100
SAN ANGELO, TEX	32	------
SAN ANTONIO, TEX	543	10,000
SAN BERNARDINO-RIVERSIDE-ONTARIO, CALIF	842	10,800
SAN DIEGO, CALIF	1,471	10,900
SAN FRANCISCO-OAKLAND, CALIF	6,342	12,000
SAN JOSE, CALIF	2,761	12,600
SAN JUAN, P.R	215	9,500
SANTA BARBARA, CALIF	437	12,200
SAVANNAH, GA	118	9,400
SCRANTON, PA	67	8,300
SEATTLE-EVERETT, WASH	1,708	11,000
SHREVEPORT, LA	259	10,000
SIOUX CITY, IOWA-NEB	34	------
SIOUX FALLS, S.DAK	45	7,900
SOUTH BEND, IND	312	9,700
SPOKANE, WASH	134	8,600

TABLE 31.—NUMBER AND MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA, 1964—CONTINUED

LOCATION	TOTAL	MEDIAN ANNUAL SALARY
STANDARD METROPOLITAN STATISTICAL AREAS - CONTINUED		
SPRINGFIELD, ILL	66	9,900
SPRINGFIELD, MO	80	8,800
SPRINGFIELD, OHIO	35	9,300
SPRINGFIELD-CHICOPEE-HOLYOKE, MASS.-CONN	386	10,900
STAMFORD, CONN	476	12,700
STEUBENVILLE-WEIRTON, OHIO-W.VA	31	------
STOCKTON, CALIF	104	9,000
SYRACUSE, N.Y	1,000	11,200
TACOMA, WASH	220	9,000
TAMPA-ST. PETERSBURG, FLA	315	9,500
TERRE HAUTE, IND	189	9,500
TEXARKANA, TEX.-ARK	8	------
TOLEDO, OHIO-MICH	421	10,200
TOPEKA, KANS	156	9,700
TRENTON, N.J	1,515	12,000
TUCSON, ARIZ	721	10,000
TULSA, OKLA	719	11,700
TUSCALOOSA, ALA	156	9,600
TYLER, TEX	134	10,000
UTICA-ROME, N.Y	140	9,500
VALLEJO-NAPA, CALIF	102	9,900
WACO, TEX	125	9,800
WASHINGTON, D.C.-MD.-VA	11,788	12,600
WATERBURY, CONN	186	10,600
WATERLOO, IOWA	42	9,200
WEST PALM BEACH, FLA	85	10,600
WHEELING, W.VA.-OHIO	32	9,000
WICHITA, KANS	401	10,000
WICHITA FALLS, TEX	10	------
WILKES-BARRE-HAZELTON, PA	86	7,800
WILMINGTON, DEL.-N.J.-MD	2,594	13,500
WINSTON SALEM, N.C	195	10,400
WORCHESTER, MASS	341	10,000
YORK, PA	94	9,200
YOUNGSTOWN-WARREN, OHIO	106	8,700
OTHER LOCATIONS	57,101	10,000

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 32.—NUMBER OF SCIENTISTS WITH A KNOWLEDGE OF SELECTED FOREIGN LANGUAGES, BY FIELD, 1964

LANGUAGE	TOTAL	SCIENTIFIC AND TECHNICAL FIELD: CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES
GERMAN	124,343	44,316	6,910	2,107	18,366	9,400	2,951
FRENCH	107,400	31,352	6,023	1,578	14,568	8,943	2,600
SPANISH	36,996	5,853	6,741	1,088	2,590	2,473	1,861
RUSSIAN	8,167	1,904	792	242	1,982	906	115
ITALIAN	4,957	1,414	261	121	597	414	81
JAPANESE	2,407	567	131	168	307	210	76
POLISH	1,753	667	48	27	205	129	40
HEBREW	1,468	283	29	14	259	214	13
OTHER CHINESE	1,384	598	74	6	310	13	27
SWEDISH	1,220	263	98	33	140	89	79
DUTCH	1,173	332	87	16	212	77	36
MODERN GREEK	1,160	350	56	29	133	101	6
PORTUGUESE	1,115	133	241	41	86	60	48

LANGUAGE	SCIENTIFIC AND TECHNICAL FIELD: BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELDS
GERMAN	17,002	6,987	1,214	4,523	1,240	403	8,924
FRENCH	16,253	9,380	1,271	5,913	1,768	522	7,229
SPANISH	4,587	3,979	543	2,971	669	385	3,256
RUSSIAN	523	314	106	343	86	139	715
ITALIAN	617	495	66	321	84	68	418
JAPANESE	347	115	41	150	43	53	199
POLISH	172	109	24	97	25	27	183
HEBREW	118	241	32	83	38	27	117
OTHER CHINESE	194	25	3	6	18	7	103
SWEDISH	177	76	19	103	32	28	83
DUTCH	138	53	9	88	20	24	81
MODERN GREEK	145	124	24	65	14	19	94
PORTUGUESE	132	55	18	119	29	52	101

NOTE - INCLUDES LANGUAGES WITH 1,000 OR MORE SCIENTISTS REPORTING TO THE NATIONAL REGISTER IN 1964.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 33.—NUMBER OF SCIENTISTS WITH A KNOWLEDGE OF SELECTED FOREIGN LANGUAGES, BY PROFICIENCIES, 1964

LANGUAGE	TOTAL	PROFICIENCY								SOME KNOWLEDGE BUT CAN'T USE AS A MEDIUM OF COMMUNICATION	NO REPORT OF PROFICIENCY
		CAN PREPARE AND DELIVER LECTURES		CAN CONVERSE		HAVE FACILITY TO TRANSLATE TECHNICAL JOURNALS		CAN READ TECHNICAL ARTICLES FOR OWN USE			
		FLUENTLY	SUPERFICIALLY	FLUENTLY	PASSABLY	INTO ENGLISH	FROM ENGLISH	EASILY	WITH DIFFICULTY		
GERMAN	123,944	5,780	9,865	7,178	24,437	42,268	9,366	36,034	57,378	32,121	54
FRENCH	106,860	3,050	9,533	3,734	21,029	38,671	6,799	43,161	39,523	25,424	60
SPANISH	36,596	2,516	4,049	3,161	12,122	11,202	3,733	10,870	10,547	13,837	15
RUSSIAN	8,020	559	779	685	1,494	3,243	800	2,020	3,428	2,541	3
ITALIAN	4,890	755	650	1,120	2,220	2,376	855	2,266	1,184	925	1
JAPANESE	2,352	772	273	809	760	869	617	776	264	623	1
POLISH	1,725	562	337	789	678	886	492	807	315	204	1
HEBREW	1,439	470	300	555	485	746	405	620	287	289	2
OTHER CHINESE	1,377	946	127	941	151	796	628	786	69	76	1
DUTCH	1,147	494	145	541	348	754	444	742	156	106	2
SWEDISH	1,193	188	191	280	533	507	163	502	280	224	—
MODERN GREEK	1,141	424	200	612	252	535	352	469	189	195	—
PORTUGUESE	1,062	234	267	303	466	599	228	638	185	159	—

NOTE - INCLUDES LANGUAGES WITH 1,000 OR MORE SCIENTISTS REPORTING TO THE NATIONAL REGISTER IN 1964.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 34.—NUMBER OF SCIENTISTS WITH A KNOWLEDGE OF SELECTED FOREIGN AREAS, BY FIELD, 1964

AREA	TOTAL	SCIENTIFIC AND TECHNICAL FIELD												
		CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELDS
ALL AREAS	223,854	63,053	17,907	5,510	26,698	17,411	9,526	27,135	16,804	2,843	12,143	2,703	1,351	20,770
SELECTED FOREIGN AREAS	31,826	7,234	2,396	1,429	3,521	2,406	930	4,946	2,247	398	2,630	707	497	2,487
GREAT BRITAIN	5,251	1,365	164	255	773	388	89	962	374	72	360	87	25	337
GERMANY	4,469	1,312	146	175	630	388	116	490	328	43	279	88	87	387
CANADA, ST. PIERRE AND MIQUELON ISLANDS	3,750	829	682	101	295	305	178	491	259	40	217	35	6	312
WESTERN EUROPE, GENERAL	3,305	700	212	221	326	214	93	411	254	36	459	69	24	286
JAPAN	2,793	512	160	348	260	255	78	396	166	42	239	59	36	242
FRANCE, CORSICA, MONACO	2,067	439	91	57	262	237	20	297	179	21	161	50	66	187
MEXICO	1,874	272	338	23	70	76	95	424	131	15	118	66	73	173
CENTRAL AMERICA	1,662	174	240	89	40	56	98	406	78	13	268	53	32	115
INDIAN SUBCONTINENT	1,570	300	125	33	143	99	71	236	96	53	175	76	46	117
SCANDINAVIAN PENINSULA	1,458	325	87	52	211	89	35	294	91	18	96	53	25	82
AUSTRIA, LIECHTENSTEIN, SWITZERLAND	1,431	474	48	12	235	121	10	212	132	9	79	11	18	70
ITALY	1,121	264	49	28	126	78	24	173	111	12	96	27	33	100
CHINA	1,075	268	54	35	150	100	23	154	48	22	83	33	26	79
OTHER FOREIGN AREAS	15,669	2,704	2,465	819	1,200	879	606	2,386	837	211	1,360	419	437	1,346
NO REPORT OF FOREIGN AREAS	176,359	53,115	13,046	3,262	21,977	14,126	7,990	19,803	13,720	2,236	8,153	1,577	417	16,937

NOTE - INCLUDES AREAS WITH 1,000 OR MORE SCIENTISTS REPORTING TO THE NATIONAL REGISTER IN 1964.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 35.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY SUBFIELD, 1964

SUBFIELD	MEDIAN SALARY
ALL SUBFIELDS	11,000
ANALYTICAL CHEMISTRY	9,600
INORGANIC CHEMISTRY	10,800
ORGANIC CHEMISTRY	11,800
RELATED CHEMICAL SPECIALTIES	11,000
CHEMISTRY, OTHER	10,200
ACOUSTICS	12,000
ATOMIC AND MOLECULAR PHYSICS	11,700
ELECTROMAGNETISM	12,300
ELEMENTARY PARTICLES	10,900
MECHANICS	11,500
NUCLEAR PHYSICS	12,200
OPTICS	12,500
PHYSICS OF FLUIDS	13,300
SOLID STATE PHYSICS	12,900
THERMAL PHYSICS	11,000
OTHER PHYSICS SPECIALTIES	8,900
PHYSICS, OTHER	10,800
ASTRONOMY	11,500
ATMOSPHERIC DYNAMICS, CHEMISTRY, AND PHYSICS	12,100
CLIMATOLOGY	10,800
SYNOPTIC METEOROLOGY	10,200
AREA SPECIALIZATIONS	10,500
METEOROLOGICAL INSTRUMENTATION	12,000
METEOROLOGY, OTHER	----
GEOCHEMISTRY	10,400
GEODESY	12,000
GEOLOGY	10,300
PALEONTOLOGY	9,200
SOLID-EARTH GEOPHYSICS	11,400
GEOGRAPHY	8,800
HYDROLOGY	11,000
OCEANOGRAPHY	10,500
ATMOSPHERIC, LITHOSPHERIC, AND HYDROSPHERIC SPECIALTIES, OTHER	11,000
ALGEBRA	8,200
ANALYSIS AND FUNCTIONAL ANALYSIS	9,000
GEOMETRY	8,400
LOGIC	9,100
MATHEMATICS OF RESOURCE USE	14,000
NUMBER THEORY	8,600
NUMERICAL METHODS AND COMPUTATION	12,000
TOPOLOGY	9,000
PROBABILITY	11,100
MATHEMATICS, OTHER	8,500
ANATOMY	10,500
BOTANY	9,000
ECOLOGY	8,400
ENTOMOLOGY	10,000
GENETICS	10,000
IMMUNOLOGY	12,000
MICROBIOLOGY	10,200
NUTRITION	11,500
PATHOLOGY	16,000
PHARMACOLOGY	13,600
PHYSIOLOGY	12,300
PHYTOPATHOLOGY	10,200
VIROLOGY	12,100
ZOOLOGY	8,500
AGRONOMY	10,300
ANIMAL HUSBANDRY	10,100
FISH AND WILDLIFE	8,100
FORESTRY	8,600
HORTICULTURE	10,400
OTHER BIO-MEDICAL SPECIALTIES	16,000
BIOLOGY, OTHER	8,000
CLINICAL PSYCHOLOGY	10,100
COUNSELING AND GUIDANCE	9,900
DEVELOPMENTAL PSYCHOLOGY	9,800
EDUCATIONAL PSYCHOLOGY	10,300
ENGINEERING PSYCHOLOGY	14,500
GENERAL PSYCHOLOGY	9,800
INDUSTRIAL AND PERSONNEL PSYCHOLOGY	13,200
PERSONALITY	10,000
SCHOOL PSYCHOLOGY	9,400
PSYCHOLOGY, OTHER	10,500
APPLIED SOCIOLOGY	11,800
GENERAL SOCIOLOGY	8,900
METHODOLOGY	11,000
POPULATION	11,200
RURAL-URBAN SOCIOLOGY	10,400
SOCIAL CHANGE AND DEVELOPMENT	11,500
SOCIAL ORGANIZATION, STRUCTURE, AND INSTITUTIONS	10,000
SOCIAL PROBLEMS, SOCIAL DISORGANIZATION	10,100
SOCIOLOGY, OTHER	10,000
GENERAL ECONOMIC THEORY	10,600
ECONOMIC HISTORY, HISTORY OF THOUGHT	9,800
ECONOMIC SYSTEMS, DEVELOPMENT AND PLANNING	12,100
ECONOMIC STATISTICS	11,000
MONETARY AND FISCAL THEORY AND INSTITUTIONS	11,400
INTERNATIONAL ECONOMICS	12,500
BUSINESS FINANCE AND ADMINISTRATION, MARKETING AND ACCOUNTING	13,000
INDUSTRIAL ORGANIZATIONS, GOVERNMENT AND BUSINESS, INDUSTRY STUDIES	13,000
LAND ECONOMICS	11,300
LABOR ECONOMICS	12,000
POPULATION, WELFARE PROGRAMS, STANDARDS OF LIVING	12,000
ECONOMICS, OTHER	13,000
APPLICATIONS TO LANGUAGE TEACHING	8,600
DESCRIPTIVE LINGUISTICS	8,500
GENERAL LINGUISTICS	9,400
HISTORICAL AND COMPARATIVE LINGUISTICS	10,000
LANGUAGE IN RELATION TO OTHER FIELDS	9,600
LANGUAGE POLICIES	------
LITERACY AND WRITING SYSTEMS	------
MECHANIZED APPLICATIONS	------
PHONETICS	------
LINGUISTICS, OTHER	------
AGRICULTURAL AND FOOD CHEMISTRY	11,000
BIOCHEMISTRY	11,000
BIOPHYSICS	12,000
ELECTRONICS	12,500
EXPERIMENTAL, COMPARATIVE, AND PHYSIOLOGICAL PSYCHOLOGY	10,000
PHYSICAL CHEMISTRY	12,000
PSYCHOMETRICS	11,300
SOIL SPECIALTIES	10,300
SOCIAL PSYCHOLOGY	10,500
STATISTICS	12,000
ENGINEERING	12,000
OTHER SPECIALTIES	8,900

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 36.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD AND PROGRAM, 1964

SCIENTIFIC AND TECHNICAL FIELD	TOTAL	NUMBER RECEIVING SUPPORT	GOVERNMENTAL PROGRAMS										NO SUPPORT	SUPPORT STATUS UNKNOWN	NO REPORT
			AGRICULTURE	ATOMIC ENERGY	DEFENSE	EDUCATION	HEALTH	INTERNATIONAL	NATURAL RESOURCES	PUBLIC WORKS	SPACE	OTHER			
ALL FIELDS	223,854	97,004(1)	10,957	11,267	29,399	8,679	20,736	1,835	6,822	1,298	13,625	13,144	104,853	6,134	15,863
CHEMISTRY	63,053	19,305	1,582	3,361	5,667	1,280	6,029	129	740	132	2,772	1,815	36,903	2,303	4,542
EARTH SCIENCES	17,907	4,808	226	371	1,232	340	152	191	1,624	336	319	1,064	11,238	314	1,547
METEOROLOGY	5,510	4,814	327	223	2,428	136	203	143	214	105	656	1,585	440	45	211
PHYSICS	26,698	16,718	60	4,371	8,100	1,055	422	113	112	44	4,607	1,762	6,838	648	2,494
MATHEMATICS	17,411	7,818	63	554	4,397	898	358	71	76	68	1,933	1,108	7,874	535	1,184
AGRICULTURAL SCIENCES	9,526	6,406	3,701	93	147	157	137	76	2,500	155	11	476	2,642	157	321
BIOLOGICAL SCIENCES	27,135	16,123	3,247	957	1,122	1,371	9,116	195	751	31	450	1,619	8,756	529	1,727
PSYCHOLOGY	16,804	6,397	44	56	1,178	1,666	2,899	126	19	21	323	1,161	8,622	661	1,124
STATISTICS	2,843	1,484	95	81	578	88	276	37	36	23	229	376	1,152	70	137
ECONOMICS	12,143	3,589	1,275	115	557	255	141	477	333	122	234	991	7,536	198	820
SOCIOLOGY	2,703	985	114	3	65	226	447	68	12	13	16	263	1,512	35	171
LINGUISTICS	1,351	403	3	4	92	194	39	51	2	2	1	87	719	63	166
OTHER FIELDS	20,770	8,154	220	1,078	3,836	1,013	517	158	403	246	2,074	837	10,621	576	1,419

(1)OF THIS NUMBER, 20,758 SCIENTISTS REPORTED SUPPORT FROM MORE THAN 1 FEDERAL PROGRAM, HENCE THE COLUMNS GIVING NUMBER OF SCIENTISTS BY PROGRAM DO NOT ADD TO TOTAL.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 37.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY HIGHEST DEGREE AND PROGRAM, 1964

HIGHEST DEGREE	TOTAL	NUMBER RECEIVING SUPPORT	GOVERNMENTAL PROGRAMS										NO SUPPORT	SUPPORT STATUS UNKNOWN	NO REPORT
			AGRICULTURE	ATOMIC ENERGY	DEFENSE	EDUCATION	HEALTH	INTERNATIONAL	NATURAL RESOURCES	PUBLIC WORKS	SPACE	OTHER			
ALL DEGREES	223,854	97,004(1)	10,957	11,267	29,399	8,679	20,736	1,835	6,822	1,298	13,625	13,144	104,853	6,134	15,863
PH.D.	79,372	39,613	5,501	5,093	8,954	4,400	12,204	890	1,610	231	4,309	5,538	34,188	1,312	4,259
PROFESSIONAL MEDICAL	5,925	4,235	77	130	271	246	3,641	44	4	2	94	248	1,397	67	226
MASTER'S	61,222	23,752	2,618	2,694	8,360	2,611	2,470	439	1,859	320	3,914	3,164	30,065	2,039	5,366
BACHELOR'S	72,364	27,116	2,610	3,239	10,600	1,353	2,298	401	3,216	683	4,984	3,642	37,027	2,561	5,660
LESS THAN BACHELOR'S	2,878	1,549	92	67	871	26	52	36	87	50	190	399	1,080	71	178
NO REPORT	2,093	739	59	44	343	43	71	25	46	12	134	153	1,096	84	174

(1)OF THIS NUMBER, 20,758 SCIENTISTS REPORTED SUPPORT FROM MORE THAN 1 FEDERAL PROGRAM, HENCE THE COLUMNS GIVING NUMBER OF SCIENTISTS BY PROGRAM DO NOT ADD TO TOTAL.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 38.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY TYPE OF EMPLOYER AND PROGRAM, 1964

TYPE OF EMPLOYER	TOTAL	NUMBER RECEIVING SUPPORT	GOVERNMENTAL PROGRAMS										NO SUPPORT	SUPPORT STATUS UNKNOWN	NO REPORT
			AGRICULTURE	ATOMIC ENERGY	DEFENSE	EDUCATION	HEALTH	INTERNATIONAL	NATURAL RESOURCES	PUBLIC WORKS	SPACE	OTHER			
ALL EMPLOYERS	223,854	97,004(1)	10,957.	11,267	29,399	8,679	20,736	1,835	6,822	1,298	13,625	13,144	104,853	6,134	15,863
EDUCATIONAL INSTITUTIONS	77,727	37,915	5,275	5,259	4,896	7,117	12,797	556	1,138	144	2,374	5,293	33,101	3,142	3,569
FEDERAL GOVERNMENT	23,405	23,405	4,650	1,001	6,046	520	2,788	676	4,153	570	2,145	4,865	------	------	------
OTHER GOVERNMENT	7,472	3,646	512	206	137	301	1,092	43	931	260	83	599	3,245	366	215
MILITARY	5,522	5,522	9	176	3,624	110	590	60	22	21	308	1,012	------	------	------
NONPROFIT ORGANIZATIONS	8,722	5,314	137	723	1,933	342	2,226	169	139	43	763	508	2,926	243	239
INDUSTRY AND BUSINESS	84,421	19,771	256	3,675	12,488	148	796	242	376	223	7,805	632	61,193	2,231	1,226
SELF-EMPLOYED	4,277	620	42	49	145	59	241	19	27	26	75	103	3,418	82	157
OTHER	1,434	593	30	157	90	56	154	63	22	11	53	98	741	45	55
NOT EMPLOYED	9,617	------	------	------	------	------	------	------	------	------	------	------	------	------	9,617
NO REPORT	1,257	218	46	21	40	26	52	7	14	------	19	34	229	25	785

(1)OF THIS NUMBER, 20,758 SCIENTISTS REPORTED SUPPORT FROM MORE THAN 1 FEDERAL PROGRAM, HENCE THE COLUMNS GIVING NUMBER OF SCIENTISTS BY PROGRAM DO NOT ADD TO TOTAL.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 39.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY WORK ACTIVITY AND PROGRAM, 1964

WORK ACTIVITY	TOTAL	NUMBER RECEIVING SUPPORT	GOVERNMENTAL PROGRAMS										NO SUPPORT	SUPPORT STATUS UNKNOWN	NO REPORT
			AGRICULTURE	ATOMIC ENERGY	DEFENSE	EDUCATION	HEALTH	INTERNATIONAL	NATURAL RESOURCES	PUBLIC WORKS	SPACE	OTHER			
ALL ACTIVITIES	223,854	97,004(1)	10,957	11,267	29,399	8,679	20,736	1,835	6,822	1,298	13,625	13,144	104,853	6,134	15,863
RESEARCH AND DEVELOPMENT (A)	77,699	45,703	5,432	6,618	13,709	1,792	11,342	431	2,231	237	7,291	4,807	27,443	2,498	2,055
BASIC RESEARCH	35,781	25,041	2,690	4,087	4,864	1,233	8,730	189	1,130	59	2,634	3,319	7,945	1,259	1,536
APPLIED RESEARCH	30,280	15,728	2,689	1,723	5,905	502	2,468	217	1,011	142	2,930	1,280	13,285	860	407
MANAGEMENT OR ADMINISTRATION (B)	46,255	21,652	2,728	2,340	8,708	1,482	3,087	726	2,749	481	3,853	2,527	23,600	399	604
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	24,568	12,886	1,335	1,651	6,056	676	1,995	412	1,022	173	2,973	1,244	11,202	166	314
TEACHING	41,209	13,778	1,208	978	1,647	4,512	3,754	255	458	51	603	2,476	24,456	1,479	1,496
PRODUCTION AND INSPECTION	16,582	3,630	341	608	1,613	43	396	65	230	163	736	363	12,007	751	194
OTHER	26,301	9,731	861	530	3,116	657	1,581	296	965	340	870	2,426	15,165	862	543
NOT EMPLOYED	9,617	------	------	------	------	------	------	------	------	------	------	------	------	------	9,617
NO REPORT	6,191	2,510	387	193	606	193	576	62	189	26	272	545	2,182	145	1,354

(1)OF THIS NUMBER, 20,758 SCIENTISTS REPORTED SUPPORT FROM MORE THAN 1 FEDERAL PROGRAM, HENCE THE COLUMNS GIVING NUMBER OF SCIENTISTS BY PROGRAM DO NOT ADD TO TOTAL.

(A)INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 40.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY STATE AND PROGRAM, 1964

STATE	TOTAL	NUMBER RECEIVING SUPPORT	GOVERNMENTAL PROGRAMS				
			AGRICULTURE	ATOMIC ENERGY	DEFENSE	EDUCATION	HEALTH
TOTAL	223,854	97,004(1)	10,957	11,267	29,399	8,679	20,736
ALABAMA	1,887	1,142	214	21	302	62	168
ALASKA	452	311	44	4	51	13	18
ARIZONA	1,768	900	214	46	233	78	127
ARKANSAS	770	369	113	27	50	24	71
CALIFORNIA	26,645	14,487	968	1,894	6,126	990	2,209
COLORADO	3,656	2,086	225	256	510	175	277
CONNECTICUT	4,149	1,653	115	175	600	138	351
DELAWARE	2,387	263	33	26	129	14	36
DISTRICT OF COLUMBIA	7,175	6,195	584	339	1,929	359	813
FLORIDA	3,708	1,870	264	98	572	185	381
GEORGIA	2,238	1,079	248	57	202	111	325
HAWAII	742	438	92	20	129	41	70
IDAHO	814	545	143	183	23	41	18
ILLINOIS	11,537	3,881	425	821	746	519	1,050
INDIANA	4,628	1,404	245	171	293	225	368
IOWA	2,351	1,020	232	278	75	135	262
KANSAS	2,088	806	169	51	125	132	229
KENTUCKY	1,545	609	128	55	75	79	185
LOUISIANA	3,172	882	273	25	105	87	219
MAINE	589	250	59	11	39	39	52
MARYLAND	7,005	5,480	586	301	2,115	202	1,486
MASSACHUSETTS	9,540	4,963	126	381	2,168	378	1,322
MICHIGAN	7,573	2,398	253	183	536	349	731
MINNESOTA	3,811	1,482	259	98	293	190	443
MISSISSIPPI	978	414	166	14	48	44	76
MISSOURI	3,722	1,435	211	101	337	159	428
MONTANA	797	429	139	3	28	31	58
NEBRASKA	1,118	555	172	23	123	42	113
NEVADA	430	274	52	91	51	16	19
NEW HAMPSHIRE	650	334	63	16	74	40	97
NEW JERSEY	11,844	2,956	147	262	1,507	255	421
NEW MEXICO	2,023	1,455	130	732	460	51	67
NEW YORK	24,510	8,272	407	1,037	2,376	964	2,652
NORTH CAROLINA	3,118	1,333	290	95	238	132	453
NORTH DAKOTA	460	275	107	9	23	41	29
OHIO	10,135	3,590	255	521	1,102	368	833
OKLAHOMA	3,112	770	151	34	150	92	195
OREGON	2,253	1,196	306	55	86	129	291
PENNSYLVANIA	12,813	4,434	388	549	1,383	438	1,185
RHODE ISLAND	895	421	39	43	139	51	111
SOUTH CAROLINA	1,203	534	122	205	84	28	54
SOUTH DAKOTA	463	276	127	5	24	34	30
TENNESSEE	3,108	1,656	150	888	125	123	276
TEXAS	10,660	2,819	345	188	950	269	533
UTAH	1,570	923	124	56	308	58	184
VERMONT	343	157	43	4	13	21	61
VIRGINIA	3,741	1,967	153	130	981	131	253
WASHINGTON	3,717	2,053	251	452	444	194	349
WEST VIRGINIA	1,513	364	81	12	36	36	70
WISCONSIN	3,912	1,464	261	145	183	195	466
WYOMING	717	269	91	12	9	26	15
PUERTO RICO	355	169	24	27	23	20	26
FOREIGN	3,464	1,697	150	37	668	125	180

TABLE 40.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY STATE AND PROGRAM, 1964—CONTINUED

STATE	GOVERNMENTAL PROGRAMS					NO SUPPORT	SUPPORT STATUS UNKNOWN	NO REPORT
	INTERNATIONAL	NATURAL RESOURCES	PUBLIC WORKS	SPACE	OTHER			
TOTAL	1,835	6,822	1,298	13,625	13,144	104,853	6,134	15,863
ALABAMA	5	83	8	364	99	635	30	80
ALASKA	2	99	12	29	76	120	8	13
ARIZONA	7	139	17	75	122	681	48	139
ARKANSAS	------	51	9	9	56	333	23	45
CALIFORNIA	155	687	177	3,994	1,325	9,478	641	2,039
COLORADO	40	471	46	269	334	1,260	75	235
CONNECTICUT	21	53	15	284	221	2,025	117	354
DELAWARE	1	4	------	45	28	1,941	61	122
DISTRICT OF COLUMBIA	440	591	139	520	1,998	729	43	208
FLORIDA	33	132	15	331	282	1,326	119	393
GEORGIA	9	97	19	66	152	949	49	161
HAWAII	17	50	6	22	71	248	14	42
IDAHO	1	146	9	4	36	217	12	40
ILLINOIS	39	103	51	264	557	6,361	418	877
INDIANA	12	43	14	111	206	2,663	174	387
IOWA	11	34	10	41	105	1,057	97	177
KANSAS	15	56	14	37	137	1,043	65	174
KENTUCKY	8	82	12	17	78	773	68	95
LOUISIANA	10	66	10	86	115	2,046	81	163
MAINE	1	39	5	11	38	288	7	44
MARYLAND	73	175	28	703	663	1,025	93	407
MASSACHUSETTS	84	135	38	964	564	3,391	237	949
MICHIGAN	40	173	30	237	368	4,375	256	544
MINNESOTA	6	129	14	180	169	1,937	117	275
MISSISSIPPI	4	57	26	12	45	490	18	56
MISSOURI	15	89	28	152	221	1,932	90	265
MONTANA	3	150	11	7	67	306	8	54
NEBRASKA	3	48	11	7	75	456	24	83
NEVADA	------	58	4	21	29	128	6	22
NEW HAMPSHIRE	2	26	6	26	37	232	17	67
NEW JERSEY	24	91	21	576	285	7,708	426	754
NEW MEXICO	------	124	16	174	91	435	30	103
NEW YORK	142	199	68	1,012	1,049	13,529	832	1,877
NORTH CAROLINA	17	127	22	74	199	1,429	94	262
NORTH DAKOTA	------	67	3	2	37	150	3	32
OHIO	35	165	37	741	398	5,580	325	640
OKLAHOMA	9	84	15	61	124	2,068	81	193
OREGON	5	346	35	17	171	815	54	188
PENNSYLVANIA	42	233	67	589	556	6,986	451	942
RHODE ISLAND	2	21	1	25	63	346	19	109
SOUTH CAROLINA	2	29	3	20	54	574	33	62
SOUTH DAKOTA	1	47	3	4	38	151	6	30
TENNESSEE	9	108	20	109	139	1,211	72	169
TEXAS	31	178	42	544	387	6,937	256	648
UTAH	9	142	25	82	124	506	24	117
VERMONT	------	23	1	3	17	150	7	29
VIRGINIA	27	103	29	342	203	1,444	70	260
WASHINGTON	23	229	46	194	262	1,337	79	248
WEST VIRGINIA	3	85	15	35	54	1,021	43	85
WISCONSIN	19	160	13	94	206	1,912	145	391
WYOMING	------	112	9	1	33	397	11	40
PUERTO RICO	9	15	4	6	35	150	9	27
FOREIGN	369	68	19	32	345	1,572	48	147

(1)OF THIS NUMBER, 20,758 SCIENTISTS REPORTED SUPPORT FROM MORE THAN 1 FEDERAL PROGRAM, HENCE THE COLUMNS GIVING NUMBER OF SCIENTISTS BY PROGRAM DO NOT ADD TO TOTAL.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 41.—NUMBER AND PERCENT OF SCIENTISTS, BY FIELD AND SEX, 1964

SCIENTIFIC AND TECHNICAL FIELD	TOTAL	MALE		FEMALE	
		NUMBER	PERCENT DISTRIBUTION	NUMBER	PERCENT DISTRIBUTION
ALL FIELDS	223,854	206,750	100	17,104	100
CHEMISTRY	63,053	58,849	28	4,204	25
EARTH SCIENCES	17,907	17,390	8	517	3
METEOROLOGY	5,510	5,424	3	86	1
PHYSICS	26,698	25,842	12	856	5
MATHEMATICS	17,411	15,664	8	1,747	10
AGRICULTURAL SCIENCES	9,526	9,475	5	51	---
BIOLOGICAL SCIENCES	27,135	24,028	12	3,107	18
PSYCHOLOGY	16,804	13,057	6	3,747	22
STATISTICS	2,843	2,554	1	289	2
ECONOMICS	12,143	11,650	6	493	3
SOCIOLOGY	2,703	2,296	1	407	2
LINGUISTICS	1,351	1,090	1	261	2
OTHER FIELDS	20,770	19,431	9	1,339	8

NOTE - PERCENTS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 42.—NUMBER OF WOMEN SCIENTISTS, BY FIELD AND HIGHEST DEGREE, 1964

SCIENTIFIC AND TECHNICAL FIELD	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ALL FIELDS	17,104	5,458	265	6,526	4,661	74	120
CHEMISTRY	4,204	976	22	1,041	2,111	21	33
EARTH SCIENCES	517	99	------	202	206	5	5
METEOROLOGY	86	11	------	28	37	6	4
PHYSICS	856	212	1	334	299	2	8
MATHEMATICS	1,747	266	------	954	492	16	19
AGRICULTURAL SCIENCES	51	7	------	12	28	3	1
BIOLOGICAL SCIENCES	3,107	1,235	232	971	650	4	15
PSYCHOLOGY	3,747	1,836	4	1,803	94	------	10
STATISTICS	289	55	------	126	93	9	6
ECONOMICS	493	195	------	228	61	4	5
SOCIOLOGY	407	272	3	116	14	1	1
LINGUISTICS	261	104	1	115	33	------	8
OTHER FIELDS	1,339	190	2	596	543	3	5

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 43.—NUMBER OF WOMEN SCIENTISTS, BY FIELD AND TYPE OF EMPLOYER, 1964

SCIENTIFIC AND TECHNICAL FIELD	TOTAL	TYPE OF EMPLOYER								NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER		
ALL FIELDS	17,104	8,378	1,347	858	50	1,110	2,241	469	209	2,308	134
CHEMISTRY	4,204	1,485	397	88	10	253	1,102	35	18	790	26
EARTH SCIENCES	517	210	65	23	3	16	56	18	8	111	7
METEOROLOGY	86	22	30	2	13	4	7	------	------	8	------
PHYSICS	856	419	90	2	2	32	123	8	1	173	6
MATHEMATICS	1,747	940	127	24	1	59	354	10	13	207	12
AGRICULTURAL SCIENCES	51	16	9	9	------	1	6	1	------	8	1
BIOLOGICAL SCIENCES	3,107	2,075	223	120	15	192	124	28	30	276	24
PSYCHOLOGY	3,747	1,733	159	492	6	396	89	336	99	398	39
STATISTICS	289	68	76	29	------	24	54	4	9	23	2
ECONOMICS	493	222	87	24	------	18	50	6	13	64	9
SOCIOLOGY	407	284	22	21	------	27	4	7	2	38	2
LINGUISTICS	261	157	10	4	------	28	7	------	2	51	2
OTHER FIELDS	1,339	747	52	20	------	60	265	16	14	161	4

SOURCE - NATIONAL REGISTFR OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

TABLE 44.—NUMBER OF WOMEN SCIENTISTS, BY FIELD AND WORK ACTIVITY, 1964

SCIENTIFIC AND TECHNICAL FIELD	TOTAL	WORK ACTIVITY								NOT EMPLOYED	NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER		
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D					
ALL FIELDS	17,104	5,279	2,862	2,130	1,065	483	4,897	612	2,416	2,308	527
CHEMISTRY	4,204	1,871	1,244	554	160	87	634	396	255	790	98
EARTH SCIENCES	517	100	70	29	25	11	130	5	120	111	26
METEOROLOGY	86	37	23	14	5	2	4	------	30	8	2
PHYSICS	855	340	215	100	26	17	263	4	36	173	14
MATHEMATICS	1,747	407	90	186	98	55	790	83	111	207	51
AGRICULTURAL SCIENCES	51	16	5	9	4	1	4	10	8	8	1
BIOLOGICAL SCIENCES	3,107	1,055	806	246	176	96	1,290	37	182	276	91
PSYCHOLOGY	3,747	987	216	760	310	99	636	------	1,281	398	135
STATISTICS	289	116	24	72	42	21	30	35	29	23	14
ECONOMICS	493	112	48	63	73	41	157	19	46	64	22
SOCIOLOGY	407	111	70	41	41	26	178	2	20	38	17
LINGUISTICS	261	43	22	21	14	2	119	------	20	51	14
OTHER FIELDS	1,339	84	29	35	1	25	662	21	278	161	42

(A) INCLUDES DEVELOPMENT OR DESIGN. NOT SEPARATELY IDENTIFIED.
(B) INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT. NOT SEPARATELY IDENTIFIED.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

TABLE 45.—NUMBER OF WOMEN SCIENTISTS, BY FIELD AND YEARS OF PROFESSIONAL EXPERIENCE, 1964

SCIENTIFIC AND TECHNICAL FIELD	TOTAL	YEARS OF PROFESSIONAL EXPERIENCE						NO REPORT OF YEARS OF EXPERIENCE
		1 YEAR	2-4 YEARS	5-9 YEARS	10-14 YEARS	15-19 YEARS	20 OR MORE YEARS	
ALL FIELDS	17,104	785	3,213	3,439	2,456	1,866	4,153	1,192
CHEMISTRY	4,204	422	1,046	766	498	391	685	396
EARTH SCIENCES	517	33	86	85	69	44	122	78
METEOROLOGY	86	3	17	19	15	11	16	5
PHYSICS	856	59	231	186	109	73	152	46
MATHEMATICS	1,747	16	344	498	249	169	421	50
AGRICULTURAL SCIENCES	51	3	9	11	3	7	17	1
BIOLOGICAL SCIENCES	3,107	89	504	512	468	356	984	194
PSYCHOLOGY	3,747	74	509	767	640	467	1,020	270
STATISTICS	289	3	50	64	44	48	73	7
ECONOMICS	493	17	67	76	55	50	181	47
SOCIOLOGY	407	3	43	92	90	56	101	22
LINGUISTICS	261	13	52	64	38	31	41	22
OTHER FIELDS	1,339	50	255	299	178	163	340	54

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 46.—NUMBER OF SCIENTISTS, BY FIELD AND PROFESSIONAL IDENTIFICATION, 1964

SCIENTIFIC AND TECHNICAL FIELD	TOTAL	PROFESSIONAL IDENTIFICATION							
		ASTRONOMER	BIOLOGIST	MEDICAL SCIENTIST	CHEMIST	ECONOMIST	ENGINEER	GEOLOGIST	LINGUIST
ALL FIELDS	223,854	686	23,047	8,053	56,173	9,106	29,656	13,602	1,230
CHEMISTRY	63,053	1	1,422	936	50,293	25	8,718	47	-----
EARTH SCIENCES	17,907	5	253	1	220	19	985	13,039	1
METEOROLOGY	5,510	12	10	-----	69	1	134	6	-----
PHYSICS	26,698	645	27	27	1,377	2	3,296	25	7
MATHEMATICS	17,411	11	16	10	61	119	1,956	10	12
AGRICULTURAL SCIENCES	9,526	2	5,543	8	215	51	137	27	-----
BIOLOGICAL SCIENCES	27,135	2	15,035	6,948	709	3	71	6	-----
PSYCHOLOGY	16,804	---	46	56	52	15	49	4	6
STATISTICS	2,843	---	7	6	49	67	187	6	-----
ECONOMICS	12,143	---	18	2	1,006	8,657	1,142	36	2
SOCIOLOGY	2,703	---	4	8	3	30	9	2	1
LINGUISTICS	1,351	---	------	-----	6	-----	8	1	1,152
OTHER FIELDS	20,770	8	666	51	2,113	117	12,964	393	49

SCIENTIFIC AND TECHNICAL FIELD	PROFESSIONAL IDENTIFICATION							NO REPORT OF PROFESSIONAL IDENTIFICATION
	MATHEMATICIAN	METEOROLOGIST	PHYSICIST	PSYCHOLOGIST	SOCIOLOGIST	STATIS-TICIAN	OTHER	
ALL FIELDS	13,450	4,961	22,117	15,683	2,809	3,149	11,493	8,639
CHEMISTRY	11	5	240	5	-----	5	760	585
EARTH SCIENCES	53	92	386	1	-----	4	1,643	1,205
METEOROLOGY	11	4,736	378	------	-----	4	105	44
PHYSICS	338	23	19,651	10	-----	4	1,114	152
MATHEMATICS	11,914	44	503	67	2	735	1,543	408
AGRICULTURAL SCIENCES	3	8	17	3	-----	13	1,131	2,368
BIOLOGICAL SCIENCES	13	2	271	65	4	21	1,280	2,705
PSYCHOLOGY	36	8	10	15,197	358	36	458	473
STATISTICS	267	2	13	154	11	1,935	107	32
ECONOMICS	96	10	18	23	17	274	634	208
SOCIOLOGY	4	-----	3	27	2,349	56	168	39
LINGUISTICS	8	-----	1	27	4	1	96	47
OTHER FIELDS	696	31	626	104	64	61	2,454	373

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 47.—NUMBER OF SCIENTISTS, BY FIELD AND MAJOR SUBJECT OF HIGHEST DEGREE, 1964

SCIENTIFIC AND TECHNICAL FIELD	TOTAL	MAJOR SUBJECT										
		CHEMISTRY	AGRICULTURE AND FOOD CHEMISTRY	BIOCHEMISTRY	PHYSICAL CHEMISTRY	GEOLOGY	GEOGRAPHY	GEOPHYSICS	OCEANOGRAPHY	METEOROLOGY	PHYSICS	ASTRONOMY
ALL FIELDS	223,854	46,927	593	4,248	4,116	13,684	1,655	561	189	2,158	24,090	579
CHEMISTRY	63,053	40,787	409	3,462	3,229	132	2	1	5	8	307	3
EARTH SCIENCES	17,907	236	2	3	12	12,610	1,341	428	147	76	364	2
METEOROLOGY	5,510	212	3	2	11	56	88	35	9	1,926	519	21
PHYSICS	26,698	1,365	1	6	577	76	1	39	1	30	19,351	510
MATHEMATICS	17,411	183	---	5	35	55	5	9	2	57	1,218	22
AGRICULTURAL SCIENCES	9,526	41	47	16	2	27	6	---	3	-----	6	---
BIOLOGICAL SCIENCES	27,135	569	107	649	29	23	7	1	19	-----	318	---
PSYCHOLOGY	16,804	57	---	2	3	5	-----	---	---	1	30	1
STATISTICS	2,843	86	2	4	3	10	3	2	---	2	51	1
ECONOMICS	12,143	926	6	16	34	53	68	---	---	6	54	---
SOCIOLOGY	2,703	4	---	1	1	2	3	---	---	-----	1	---
LINGUISTICS	1,351	7	---	-----	-----	2	-----	---	---	-----	7	---
OTHER FIELDS	20,770	2,454	16	82	180	633	131	46	3	52	1,864	19

SCIENTIFIC AND TECHNICAL FIELD	MAJOR SUBJECT													NO REPORT OF MAJOR SUBJECT
	MATHEMATICS	AGRICULTURE	FORESTRY	BIOLOGY	BIOPHYSICS	PSYCHOLOGY	SOCIAL PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	ENGINEERING	OTHER	
ALL FIELDS	15,708	5,502	4,275	26,461	286	15,511	313	1,623	10,615	2,786	1,109	26,456	7,903	6,506
CHEMISTRY	136	246	11	2,242	33	26	---	15	319	3	6	9,265	841	1,565
EARTH SCIENCES	181	82	29	233	2	6	---	4	68	7	4	1,359	305	406
METEOROLOGY	429	49	15	49	---	21	---	2	71	11	-----	296	427	1,258
PHYSICS	821	5	-----	88	42	75	---	8	50	3	7	2,594	727	321
MATHEMATICS	11,835	16	9	76	2	146	---	462	576	23	31	1,379	811	454
AGRICULTURAL SCIENCES	7	4,032	3,808	1,165	1	3	---	6	75	1	-----	67	123	90
BIOLOGICAL SCIENCES	47	942	251	21,708	200	134	3	4	34	18	7	81	790	1,194
PSYCHOLOGY	42	4	6	118	1	14,633	264	30	54	406	11	42	981	113
STATISTICS	695	22	6	45	---	203	6	899	397	36	2	157	127	84
ECONOMICS	231	48	63	41	1	44	3	123	8,439	39	3	1,027	468	450
SOCIOLOGY	22	3	1	19	---	42	30	11	68	2,160	4	11	285	35
LINGUISTICS	20	-----	2	3	---	29	4	1	3	3	985	6	249	30
OTHER FIELDS	1,242	53	74	674	4	149	3	58	461	76	49	10,172	1,769	506

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964

TABLE 48.—NUMBER OF SCIENTISTS, BY FIELD AND FIELD OF EMPLOYMENT, 1964

SCIENTIFIC AND TECHNICAL FIELD	TOTAL	FIELD OF EMPLOYMENT						
		CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES	BIOLOGICAL SCIENCES
ALL FIELDS	223,854	53,777	15,292	5,174	23,363	15,950	9,044	24,715
CHEMISTRY	63,053	51,024	73	42	500	68	39	701
EARTH SCIENCES	17,907	79	14,636	47	85	47	39	54
METEOROLOGY	5,510	16	113	4,816	72	41	2	7
PHYSICS	26,698	436	91	151	21,774	348	4	106
MATHEMATICS	17,411	30	24	27	266	14,418	2	27
AGRICULTURAL SCIENCES	9,526	101	32	8	7	7	8,443	325
BIOLOGICAL SCIENCES	27,135	713	60	18	63	40	455	23,251
PSYCHOLOGY	16,804	16	3	3	9	71	1	81
STATISTICS	2,843	25	3	2	8	292	2	4
ECONOMICS	12,143	270	15	2	19	129	22	6
SOCIOLOGY	2,703	2	1	-----	-----	11	-----	4
LINGUISTICS	1,351	6	1	-----	2	7	-----	-----
OTHER FIELDS	20,770	1,059	240	58	558	471	35	149

SCIENTIFIC AND TECHNICAL FIELD	FIELD OF EMPLOYMENT						NO REPORT OF FIELD OF EMPLOYMENT
	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELDS	
ALL FIELDS	15,479	2,501	11,959	2,686	1,183	25,930	16,801
CHEMISTRY	47	48	942	8	4	4,726	4,831
EARTH SCIENCES	12	9	119	7	3	861	1,909
METEOROLOGY	4	-----	19	-----	1	137	282
PHYSICS	26	9	73	1	7	1,635	2,037
MATHEMATICS	31	177	205	8	10	1,022	1,164
AGRICULTURAL SCIENCES	11	10	68	3	2	126	383
BIOLOGICAL SCIENCES	54	5	30	14	-----	701	1,731
PSYCHOLOGY	15,016	64	39	179	20	180	1,122
STATISTICS	95	2,031	115	12	1	107	146
ECONOMICS	17	83	9,927	18	2	273	1,360
SOCIOLOGY	60	10	29	2,374	3	69	140
LINGUISTICS	18	2	1	2	1,105	43	164
OTHER FIELDS	88	53	392	60	25	16,050	1,532

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

APPENDIX A

Detailed Statistical Tables

List of Detailed Statistical Tables

Page
A-1. Number of scientists, by field, age, and highest degree, 1964 85
A-2. Number of scientists, by field, employment status, and highest degree, 1964 88
A-3. Number of scientists, by field, type of employer, and highest degree, 1964 91
A-4. Number of scientists, by field, work activity, and highest degree, 1964 93
A-5. Number of scientists, by field, years of professional experience, and highest degree, 1964 96
A-6. Number of scientists, by field, age, and type of employer, 1964 98
A-7. Number of scientists, by field, work activity, and type of employer, 1964 101
A-8. Number of scientists, by field, years of professional experience, and type of employer, 1964 104
A-9. Number of university and college teachers, by field, highest degree, and academic rank, 1964 106
A-10. Number of scientists, by field, age, and work activity, 1964 108
A-11. Number of scientists, by field, years of professional experience, and work activity, 1964 111
A-12. Median annual salaries of full-time employed civilian scientists, by field, highest degree, and type of employer, 1964 113
A-13. Median annual salaries of full-time employed civilian scientists, by field, age, and type of employer, 1964 115
A-14. Median annual salaries of full-time employed civilian scientists, by field, work activity, and type of employer, 1964 118
A-15. Median annual salaries of full-time employed civilian scientists, by field, years of professional experience, and type of employer, 1964 121
A-16. Median annual salaries of university and college teachers, by field, salary base, and academic rank, 1964 123
A-17. Number of scientists, by State and field, 1964 124
A-18. Number of scientists, by State and highest degree, 1964 125
A-19. Number of scientists, by State and type of employer, 1964 126
A-20. Number of scientists, by State and work activity, 1964 127
A-21. Median annual salaries of full-time employed civilian scientists, by State and field, 1964 128
A-22. Median annual salaries of full-time employed civilian scientists, by State and highest degree, 1964 129
A-23. Median annual salaries of full-time employed civilian scientists, by State and type of employer, 1964 130
A-24. Median annual salaries of full-time employed civilian scientists, by State and work activity, 1964 131
A-25. Number of scientists, by Standard Metropolitan Statistical Area and field, 1964 132
A-26. Number of scientists, by Standard Metropolitan Statistical Area and highest degree, 1964 138
A-27. Number of scientists, by Standard Metropolitan Statistical Area and type of employer, 1964 141
A-28. Number of scientists, by Standard Metropolitan Statistical Area and work activity, 1964 145
A-29. Median annual salaries of full-time employed civilian scientists, by Standard Metropolitan Statistical Area and field, 1964 148
A-30. Median annual salaries of full-time employed civilian scientists, by Standard Metropolitan Statistical Area and highest degree, 1964 155
A-31. Median annual salaries of full-time employed civilian scientists, by Standard Metropolitan Statistical Area and type of employer, 1964 158
A-32. Median annual salaries of full-time employed civilian scientists, by Standard Metropolitan Statistical Area and work activity, 1964 161
A-33. Number of scientists, by foreign language and field, 1964 164
A-34. Number of scientists, by foreign language and proficiencies, 1964 168
A-35. Number of scientists with knowledge of a foreign area, by field, 1964 170
A-36. Number of scientists, by subfield and highest degree, 1964 172
A-37. Number of scientists, by subfield and age, 1964 174
A-38. Number of scientists, by subfield and type of employer, 1964 176
A-39. Number of scientists, by subfield and work activity, 1964 178
A-40. Number of scientists, by subfield and years of professional experience, 1964 180
A-41. Number of scientists receiving Federal support, by field, highest degree, and program, 1964 182

Page

A-42. Number of scientists receiving Federal support, by field, type of employer, and program, 1964 186

A-43. Number of scientists receiving Federal support, by field, work activity, and program, 1964 190

A-44. Number of scientists, full-time professionally employed, part-time student, by field and highest degree, 1964 196

A-45. Number of scientists, full-time professionally employed, part-time students, by field and type of employer, 1964 196

A-46. Number of scientists, full-time professionally employed, part-time student, by field and work activity, 1964 196

A-47. First and second work activity of scientists employed at universities and colleges, by field, 1964 197

A-48. First and second work activity of scientists employed at universities and colleges, by highest degree, 1964 200

A-49. Number of university and college teachers, by State and field, 1964 202

A-50. Number of university and college teachers, by State and academic rank, 1964 203

TABLE A-1.-NUMBER OF SCIENTISTS, BY FIELD, AGE, AND HIGHEST DEGREE, 1964

SCIENTIFIC AND TECHNICAL FIELD AND AGE	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ALL FIELDS	223,854	79,372	5,925	61,222	72,364	2,878	2,093
20-24	8,247	47	2	1,611	6,491	52	44
25-29	34,102	5,704	283	12,484	15,356	145	130
30-34	39,896	14,142	976	12,324	11,858	340	256
35-39	40,148	16,167	1,238	10,769	11,193	461	320
40-44	35,831	14,796	1,182	8,924	10,089	510	330
45-49	24,726	10,220	807	5,704	7,226	473	296
50-54	16,921	6,942	592	4,059	4,665	392	271
55-59	11,308	4,998	401	2,704	2,729	273	203
60-64	6,966	3,392	273	1,507	1,521	130	143
65-69	3,428	1,759	124	715	701	70	59
70 AND OVER	1,992	1,111	45	332	434	31	39
NO REPORT	289	94	2	89	101	1	2
CHEMISTRY	63,053	21,789	368	12,229	27,377	590	700
20-24	3,841	12	—	381	3,425	6	17
25-29	10,355	2,160	35	2,389	5,717	21	33
30-34	10,157	4,218	100	2,054	3,688	33	64
35-39	10,357	4,216	83	2,025	3,890	58	85
40-44	9,687	3,777	72	1,891	3,747	90	110
45-49	7,294	2,798	40	1,404	2,845	100	107
50-54	4,918	1,753	18	948	1,949	128	122
55-59	2,994	1,247	6	566	1,026	73	76
60-64	1,878	862	7	316	597	43	53
65-69	943	443	7	155	293	25	20
70 AND OVER	594	286	—	95	187	13	13
NO REPORT	35	17	—	5	13	—	—
EARTH SCIENCES	17,907	3,578	1	5,829	8,101	254	144
20-24	658	2	—	117	513	17	9
25-29	2,141	204	—	1,021	901	8	7
30-34	3,317	685	—	1,445	1,179	4	4
35-39	3,752	665	—	1,195	1,845	25	22
40-44	3,098	619	1	877	1,540	36	25
45-49	1,799	449	—	457	834	41	18
50-54	1,206	327	—	294	522	45	18
55-59	876	259	—	200	356	41	20
60-64	532	171	—	114	217	15	15
65-69	332	125	—	67	119	17	4
70 AND OVER	177	70	—	34	66	5	2
NO REPORT	19	2	—	8	9	—	—
METEOROLOGY	5,510	479	—	1,137	2,524	1,147	223
20-24	118	—	—	13	93	9	3
25-29	677	22	—	133	468	40	14
30-34	968	81	—	234	425	195	33
35-39	892	96	—	156	324	272	44
40-44	1,166	123	—	256	485	256	46
45-49	978	87	—	201	433	207	50
50-54	384	38	—	74	171	92	9
55-59	228	19	—	52	90	54	13
60-64	62	8	—	10	25	14	5
65-69	25	4	—	6	8	3	4
70 AND OVER	11	1	—	2	1	5	2
NO REPORT	1	—	—	—	1	—	—
PHYSICS	26,698	10,286	30	8,352	7,673	185	172
20-24	1,568	9	—	511	1,041	1	6
25-29	6,686	1,159	3	2,722	2,768	14	20
30-34	5,730	2,484	6	1,738	1,452	27	23
35-39	4,409	2,321	11	1,144	878	25	30
40-44	3,528	1,846	7	938	683	30	24
45-49	1,793	891	—	471	376	34	21
50-54	1,191	581	—	357	220	20	13
55-59	865	453	1	240	133	21	17
60-64	604	352	—	148	82	9	13
65-69	224	134	2	60	22	4	2
70 AND OVER	85	51	—	17	14	—	3
NO REPORT	15	5	—	6	4	—	—
MATHEMATICS	17,411	4,603	5	7,464	4,917	210	212
20-24	343	11	—	193	127	8	4
25-29	3,703	577	—	1,837	1,213	45	31
30-34	4,304	948	1	1,798	1,453	54	50
35-39	3,439	942	1	1,391	1,023	36	46
40-44	2,252	758	—	925	518	22	29
45-49	1,301	478	3	528	267	11	14
50-54	882	338	—	359	150	17	18
55-59	601	264	—	232	80	11	14
60-64	359	166	—	131	57	4	1
65-69	165	88	—	56	16	2	3
70 AND OVER	56	33	—	13	8	—	2
NO REPORT	6	—	—	1	5	—	—

TABLE A-1.-NUMBER OF SCIENTISTS, BY FIELD, AGE, AND HIGHEST DEGREE, 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND AGE	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
AGRICULTURAL SCIENCES	9,526	2,367	11	2,676	4,362	63	47
20-24	133	------	------	20	111	2	------
25-29	1,279	58	1	410	804	3	3
30-34	1,700	344	1	543	798	1	13
35-39	1,574	392	2	452	717	5	6
40-44	1,621	530	3	428	643	9	8
45-49	1,241	420	2	312	492	7	8
50-54	874	248	------	209	400	13	4
55-59	590	180	1	149	246	12	2
60-64	280	99	1	83	86	9	2
65-69	133	58	------	44	28	2	1
70 AND OVER	55	28	------	15	12	------	------
NO REPORT	46	10	------	11	25	------	------
BIOLOGICAL SCIENCES	27,135	13,355	5,408	5,028	3,172	71	101
20-24	351	------	2	65	282	1	1
25-29	2,800	539	240	1,140	876	1	4
30-34	4,513	2,021	857	1,077	545	2	11
35-39	5,347	2,961	1,127	828	408	4	19
40-44	4,514	2,499	1,080	589	319	6	21
45-49	3,332	1,856	748	435	263	16	14
50-54	2,436	1,312	558	355	182	18	11
55-59	1,827	1,027	380	255	143	14	8
60-64	1,160	642	257	170	77	5	9
65-69	531	317	113	64	33	2	2
70 AND OVER	247	158	44	22	20	2	1
NO REPORT	77	23	2	28	24	------	------
PSYCHOLOGY	16,804	10,843	52	5,464	417	4	24
20-24	35	2	------	25	8	------	------
25-29	1,220	460	3	683	74	------	------
30-34	2,838	1,736	7	1,016	75	------	4
35-39	3,739	2,500	11	1,158	68	------	2
40-44	3,299	2,250	9	967	70	2	1
45-49	2,047	1,442	6	559	35	------	5
50-54	1,493	1,022	7	422	38	2	2
55-59	984	633	4	320	26	------	1
60-64	589	397	4	177	11	------	------
65-69	290	204	1	75	6	------	4
70 AND OVER	237	178	------	50	6	------	3
NO REPORT	33	19	------	12	------	------	2
STATISTICS	2,843	804	3	1,133	810	43	50
20-24	22	1	------	13	8	------	------
25-29	377	52	------	218	102	3	2
30-34	572	160	1	249	155	1	6
35-39	543	158	------	219	148	6	12
40-44	462	155	------	157	133	8	9
45-49	379	121	1	129	113	5	10
50-54	228	64	1	76	77	6	4
55-59	151	48	------	44	45	9	5
60-64	80	33	------	22	19	5	1
65-69	16	6	------	4	6	------	------
70 AND OVER	12	6	------	2	3	------	1
NO REPORT	1	------	------	------	1	------	------
ECONOMICS	12,143	5,091	2	4,204	2,613	90	143
20-24	148	6	------	93	47	1	1
25-29	1,130	188	------	666	269	1	6
30-34	1,905	686	------	834	372	2	11
35-39	1,934	794	1	686	433	6	14
40-44	2,151	1,041	1	615	461	12	21
45-49	1,680	791	------	438	418	17	16
50-54	1,210	558	------	360	251	21	20
55-59	835	371	------	256	178	9	21
60-64	538	286	------	122	99	10	21
65-69	353	203	------	85	49	9	7
70 AND OVER	238	156	------	41	34	2	5
NO REPORT	21	11	------	8	2	------	------
SOCIOLOGY	2,703	2,179	9	434	65	3	13
20-24	6	1	------	1	4	------	------
25-29	92	62	------	21	6	2	1
30-34	355	279	2	67	7	------	------
35-39	513	400	1	101	9	------	2
40-44	517	424	2	80	9	------	2
45-49	414	352	1	52	6	------	3
50-54	311	247	2	48	13	------	1
55-59	191	155	------	30	4	------	2
60-64	144	123	1	17	2	1	------
65-69	85	68	------	12	3	------	2
70 AND OVER	73	66	------	5	2	------	------
NO REPORT	2	2	------	------	------	------	------

TABLE A-1.-NUMBER OF SCIENTISTS, BY FIELD, AGE, AND HIGHEST DEGREE, 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND AGE	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
LINGUISTICS	1,351	729	2	407	162	1	50
20-24	26	------	------	10	14	------	2
25-29	162	28	------	93	40	------	1
30-34	239	88	------	107	40	------	4
35-39	274	155	------	86	27	------	6
40-44	215	139	2	50	18	------	6
45-49	132	92	------	26	6	------	8
50-54	120	87	------	14	7	------	12
55-59	92	66	------	15	5	1	5
60-64	52	43	------	4	3	------	2
65-69	20	15	------	2	------	------	3
70 AND OVER	13	12	------	------	------	------	1
NO REPORT	6	4	------	------	2	------	------
OTHER FIELDS	20,770	3,269	34	6,865	10,171	217	214
20-24	998	3	------	169	818	7	1
25-29	3,480	195	1	1,151	2,118	7	8
30-34	3,298	412	1	1,162	1,669	21	33
35-39	3,375	567	1	1,328	1,423	24	32
40-44	3,321	635	5	1,151	1,463	39	28
45-49	2,336	443	6	692	1,138	35	22
50-54	1,668	367	6	543	685	30	37
55-59	1,074	276	9	345	397	28	19
60-64	688	210	3	193	246	15	21
65-69	311	94	1	85	118	6	7
70 AND OVER	194	66	1	36	81	4	6
NO REPORT	27	1	------	10	15	1	------

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-2.-NUMBER OF SCIENTISTS, BY FIELD, EMPLOYMENT STATUS, AND HIGHEST DEGREE, 1964

SCIENTIFIC AND TECHNICAL FIELD AND EMPLOYMENT STATUS	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ALL FIELDS	223,854	79,372	5,925	61,222	72,364	2,878	2,093
FULL-TIME EMPLOYED	193,943	75,275	5,562	48,858	59,838	2,591	1,819
CIVILIAN	189,350	74,674	5,094	47,642	58,282	1,955	1,703
MILITARY	4,593	601	468	1,216	1,556	636	116
PART-TIME EMPLOYED	3,560	1,352	172	1,171	791	34	40
STUDENTS	18,039	763	136	8,952	8,051	53	84
PART-TIME EMPLOYED	13,397	513	95	6,752	5,963	22	52
NOT EMPLOYED	4,642	250	41	2,200	2,088	31	32
EMPLOYED BUT NOT PROFESSIONAL WORK	2,933	334	10	761	1,695	93	40
NOT EMPLOYED	4,975	1,531	20	1,355	1,898	97	74
NO REPORT	404	117	25	125	91	10	36
CHEMISTRY	63,053	21,789	368	12,229	27,377	590	700
FULL-TIME EMPLOYED	54,218	20,607	339	9,914	22,195	536	627
CIVILIAN	53,831	20,498	303	9,810	22,057	536	627
MILITARY	387	109	36	104	138	------	------
PART-TIME EMPLOYED	631	260	6	127	223	6	9
STUDENTS	5,539	310	18	1,690	3,498	5	18
PART-TIME EMPLOYED	4,188	218	10	1,294	2,652	2	12
NOT EMPLOYED	1,351	92	8	396	846	3	6
EMPLOYED BUT NOT PROFESSIONAL WORK	768	86	1	119	540	12	10
NOT EMPLOYED	1,817	500	2	369	892	29	25
NO REPORT	80	26	2	10	29	2	11
EARTH SCIENCES	17,907	3,578	1	5,829	8,101	254	144
FULL-TIME EMPLOYED	14,987	3,356	1	4,693	6,624	198	115
CIVILIAN	14,866	3,347	1	4,633	6,577	194	114
MILITARY	121	9	------	60	47	4	1
PART-TIME EMPLOYED	368	58	------	113	176	15	6
STUDENTS	1,691	54	------	802	800	21	14
PART-TIME EMPLOYED	1,211	29	------	608	556	9	9
NOT EMPLOYED	480	25	------	194	244	12	5
EMPLOYED BUT NOT PROFESSIONAL WORK	357	19	------	88	240	7	3
NOT EMPLOYED	482	90	------	124	251	13	4
NO REPORT	22	1	------	9	10	------	2
METEOROLOGY	5,510	479	------	1,137	2,524	1,147	223
FULL-TIME EMPLOYED	5,015	467	------	992	2,303	1,050	203
CIVILIAN	2,962	453	------	630	1,355	429	95
MILITARY	2,053	14	------	362	948	621	108
PART-TIME EMPLOYED	32	7	------	9	11	4	1
STUDENTS	217	1	------	98	103	13	2
PART-TIME EMPLOYED	168	1	------	84	79	2	2
NOT EMPLOYED	49	------	------	14	24	11	------
EMPLOYED BUT NOT PROFESSIONAL WORK	151	1	------	24	73	45	8
NOT EMPLOYED	91	2	------	13	32	35	9
NO REPORT	4	1	------	1	2	------	------
PHYSICS	26,698	10,286	30	8,352	7,673	185	172
FULL-TIME EMPLOYED	21,431	9,982	26	5,764	5,337	178	144
CIVILIAN	21,057	9,920	23	5,591	5,206	175	142
MILITARY	374	62	3	173	131	3	2
PART-TIME EMPLOYED	220	90	------	81	45	------	4
STUDENTS	4,504	96	4	2,324	2,060	2	18
PART-TIME EMPLOYED	3,501	69	4	1,825	1,591	1	11
NOT EMPLOYED	1,003	27	------	499	469	1	7
EMPLOYED BUT NOT PROFESSIONAL WORK	172	22	------	53	91	4	2
NOT EMPLOYED	347	91	------	120	134	1	1
NO REPORT	24	5	------	10	6	------	3

TABLE A-2.-NUMBER OF SCIENTISTS, BY FIELD, EMPLOYMENT STATUS, AND HIGHEST DEGREE, 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND EMPLOYMENT STATUS	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
MATHEMATICS	17,411	4,603	5	7,464	4,917	210	212
FULL-TIME EMPLOYED	15,530	4,380	4	6,244	4,511	197	194
CIVILIAN	15,293	4,358	4	6,083	4,461	194	193
MILITARY	237	22	------	161	50	3	1
PART-TIME EMPLOYED	207	48	1	98	55	3	2
STUDENTS	1,231	107	------	931	185	3	5
PART-TIME EMPLOYED	946	74	------	735	132	3	2
NOT EMPLOYED	285	33	------	196	53	------	3
EMPLOYED BUT NOT PROFESSIONAL WORK	125	23	------	40	55	4	3
NOT EMPLOYED	277	38	------	127	105	1	6
NO REPORT	41	7	------	24	6	2	2
AGRICULTURAL SCIENCES	9,526	2,367	11	2,676	4,362	63	47
FULL-TIME EMPLOYED	8,755	2,289	10	2,309	4,046	60	41
CIVILIAN	8,742	2,289	10	2,304	4,038	60	41
MILITARY	13	------	------	5	8	------	------
PART-TIME EMPLOYED	92	21	------	29	41	------	1
STUDENTS	447	6	1	276	160	1	3
PART-TIME EMPLOYED	369	5	1	230	132	------	1
NOT EMPLOYED	78	1	------	46	28	1	2
EMPLOYED BUT NOT PROFESSIONAL WORK	135	10	------	44	79	1	1
NOT EMPLOYED	82	38	------	16	28	------	------
NO REPORT	15	3	------	2	8	1	1
BIOLOGICAL SCIENCES	27,135	13,355	5,408	5,028	3,172	71	101
FULL-TIME EMPLOYED	24,119	12,802	5,091	3,704	2,369	63	90
CIVILIAN	23,357	12,565	4,670	3,630	2,341	63	88
MILITARY	762	237	421	74	28	------	2
PART-TIME EMPLOYED	512	227	160	79	43	1	2
STUDENTS	1,914	82	110	1,081	636	------	5
PART-TIME EMPLOYED	1,439	58	77	824	477	------	3
NOT EMPLOYED	475	24	33	257	159	------	2
EMPLOYED BUT NOT PROFESSIONAL WORK	146	30	8	49	54	4	1
NOT EMPLOYED	364	183	16	99	64	1	1
NO REPORT	80	31	23	16	6	2	2
PSYCHOLOGY	16,804	10,843	52	5,464	417	4	24
FULL-TIME EMPLOYED	14,751	10,098	45	4,284	303	3	18
CIVILIAN	14,557	9,999	43	4,196	300	1	18
MILITARY	194	99	2	88	3	2	------
PART-TIME EMPLOYED	807	399	5	382	19	------	2
STUDENTS	580	35	2	487	56	------	------
PART-TIME EMPLOYED	417	21	2	354	40	------	------
NOT EMPLOYED	163	14	------	133	16	------	------
EMPLOYED BUT NOT PROFESSIONAL WORK	131	43	------	71	16	1	------
NOT EMPLOYED	495	248	------	223	21	------	3
NO REPORT	40	20	------	17	2	------	1
STATISTICS	2,843	804	3	1,133	810	43	50
FULL-TIME EMPLOYED	2,581	778	3	968	749	41	42
CIVILIAN	2,556	773	2	951	747	41	42
MILITARY	25	5	1	17	2	------	------
PART-TIME EMPLOYED	41	14	------	20	7	------	------
STUDENTS	144	3	------	119	19	------	3
PART-TIME EMPLOYED	114	2	------	95	16	------	1
NOT EMPLOYED	30	1	------	24	3	------	2
EMPLOYED BUT NOT PROFESSIONAL WORK	35	4	------	11	18	------	2
NOT EMPLOYED	36	4	------	14	15	2	1
NO REPORT	6	1	------	1	2	------	2

TABLE A-2.-NUMBER OF SCIENTISTS, BY FIELD, EMPLOYMENT STATUS, AND HIGHEST DEGREE, 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND EMPLOYMENT STATUS	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ECONOMICS	12,143	5,091	2	4,204	2,613	90	143
FULL-TIME EMPLOYED	10,546	4,753	2	3,368	2,242	71	110
CIVILIAN	10,502	4,741	2	3,346	2,233	71	109
MILITARY	44	12	------	22	9	------	1
PART-TIME EMPLOYED	223	88	------	89	35	2	9
STUDENTS	539	17	------	473	42	1	6
PART-TIME EMPLOYED	364	8	------	323	27	1	5
NOT EMPLOYED	175	9	------	150	15	------	1
EMPLOYED BUT NOT PROFESSIONAL WORK	450	55	------	159	222	8	6
NOT EMPLOYED	335	167	------	89	67	6	6
NO REPORT	50	11	------	26	5	2	6
SOCIOLOGY	2,703	2,179	9	434	65	3	13
FULL-TIME EMPLOYED	2,469	2,023	9	366	58	1	12
CIVILIAN	2,459	2,016	8	365	57	1	12
MILITARY	10	7	1	1	1	------	------
PART-TIME EMPLOYED	101	71	------	29	1	------	------
STUDENTS	31	9	------	19	2	1	------
PART-TIME EMPLOYED	15	1	------	12	1	1	------
NOT EMPLOYED	16	8	------	7	1	------	------
EMPLOYED BUT NOT PROFESSIONAL WORK	15	9	------	4	2	------	------
NOT EMPLOYED	81	61	------	16	2	1	1
NO REPORT	6	6	------	------	------	------	------
LINGUISTICS	1,351	729	2	407	162	1	50
FULL-TIME EMPLOYED	1,086	682	1	262	101	1	39
CIVILIAN	1,085	682	1	262	100	1	39
MILITARY	1	------	------	------	1	------	------
PART-TIME EMPLOYED	38	15	------	17	5	------	1
STUDENTS	162	6	1	104	46	------	5
PART-TIME EMPLOYED	78	3	1	52	18	------	4
NOT EMPLOYED	84	3	------	52	28	------	1
EMPLOYED BUT NOT PROFESSIONAL WORK	18	6	------	7	5	------	------
NOT EMPLOYED	42	18	------	17	5	------	2
NO REPORT	5	2	------	------	------	------	3
OTHER FIELDS	20,770	3,269	34	6,865	10,171	217	214
FULL-TIME EMPLOYED	18,455	3,058	31	5,990	9,000	192	184
CIVILIAN	18,083	3,033	27	5,841	8,810	189	183
MILITARY	372	25	4	149	190	3	1
PART-TIME EMPLOYED	288	54	------	98	130	3	3
STUDENTS	1,040	37	------	548	444	6	5
PART-TIME EMPLOYED	587	24	------	316	242	3	2
NOT EMPLOYED	453	13	------	232	202	3	3
EMPLOYED BUT NOT PROFESSIONAL WORK	430	26	1	92	300	7	4
NOT EMPLOYED	526	91	2	128	282	8	15
NO REPORT	31	3	------	9	15	1	3

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-3.-NUMBER OF SCIENTISTS, BY FIELD, TYPE OF EMPLOYER, AND HIGHEST DEGREE, 1964

SCIENTIFIC AND TECHNICAL FIELD AND TYPE OF EMPLOYER	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ALL FIELDS	223,854	79,372	5,925	61,222	72,364	2,878	2,093
EDUCATIONAL INSTITUTIONS	77,727	42,112	2,986	22,044	10,212	85	288
FEDERAL GOVERNMENT	23,405	6,717	371	6,085	9,521	510	201
OTHER GOVERNMENT	7,472	1,969	248	2,637	2,484	75	59
MILITARY	5,522	649	472	1,428	2,209	645	119
NONPROFIT ORGANIZATIONS	8,722	4,056	874	2,195	1,449	75	73
INDUSTRY AND BUSINESS	84,421	19,979	347	21,489	40,233	1,250	1,123
SELF-EMPLOYED	4,277	1,344	478	880	1,441	79	55
OTHER	1,434	516	56	458	366	14	24
NOT EMPLOYED	9,617	1,781	61	3,555	3,986	128	106
NO REPORT	1,257	249	32	451	463	17	45
CHEMISTRY	63,053	21,789	368	12,229	27,377	590	700
EDUCATIONAL INSTITUTIONS	13,616	7,389	216	2,627	3,317	13	54
FEDERAL GOVERNMENT	4,004	1,328	23	824	1,781	23	25
OTHER GOVERNMENT	888	210	9	158	483	15	13
MILITARY	648	123	36	132	357	—	—
NONPROFIT ORGANIZATIONS	1,679	921	43	293	404	12	6
INDUSTRY AND BUSINESS	37,859	10,928	19	7,184	18,708	477	543
SELF-EMPLOYED	589	162	10	112	281	12	12
OTHER	311	99	2	57	147	3	3
NOT EMPLOYED	3,168	592	10	765	1,738	32	31
NO REPORT	291	37	—	77	161	3	13
EARTH SCIENCES	17,907	3,578	1	5,829	8,101	254	144
EDUCATIONAL INSTITUTIONS	4,023	1,924	1	1,343	727	11	17
FEDERAL GOVERNMENT	2,325	512	—	734	1,034	31	14
OTHER GOVERNMENT	658	110	—	249	283	13	3
MILITARY	241	11	—	88	135	5	2
NONPROFIT ORGANIZATIONS	216	92	—	66	45	8	5
INDUSTRY AND BUSINESS	8,400	742	—	2,768	4,681	133	76
SELF-EMPLOYED	821	40	—	175	567	25	14
OTHER	87	24	—	25	35	1	2
NOT EMPLOYED	962	115	—	318	495	25	9
NO REPORT	174	8	—	63	99	2	2
METEOROLOGY	5,510	479	—	1,137	2,524	1,147	223
EDUCATIONAL INSTITUTIONS	527	204	—	195	116	7	5
FEDERAL GOVERNMENT	1,857	129	—	323	1,010	330	65
OTHER GOVERNMENT	78	7	—	20	41	8	2
MILITARY	2,113	14	—	372	990	627	110
NONPROFIT ORGANIZATIONS	152	47	—	67	26	10	2
INDUSTRY AND BUSINESS	594	67	—	121	272	106	28
SELF-EMPLOYED	18	2	—	6	4	5	1
OTHER	16	5	—	2	3	5	1
NOT EMPLOYED	140	2	—	27	56	46	9
NO REPORT	15	2	—	4	6	3	—
PHYSICS	26,698	10,286	30	8,352	7,673	185	172
EDUCATIONAL INSTITUTIONS	11,611	5,368	9	3,861	2,316	22	35
FEDERAL GOVERNMENT	2,913	819	1	836	1,219	23	15
OTHER GOVERNMENT	89	36	—	25	28	—	—
MILITARY	473	70	4	209	185	3	2
NONPROFIT ORGANIZATIONS	1,011	569	1	225	199	8	9
INDUSTRY AND BUSINESS	8,954	3,234	8	2,495	3,008	120	89
SELF-EMPLOYED	166	52	7	31	61	7	8
OTHER	25	7	—	9	8	—	1
NOT EMPLOYED	1,350	118	—	619	603	2	8
NO REPORT	106	13	—	42	46	—	5
MATHEMATICS	17,411	4,603	5	7,464	4,917	210	212
EDUCATIONAL INSTITUTIONS	7,206	3,235	—	3,365	562	14	30
FEDERAL GOVERNMENT	1,113	174	1	404	504	19	11
OTHER GOVERNMENT	211	56	1	100	44	5	5
MILITARY	277	27	—	174	71	4	1
NONPROFIT ORGANIZATIONS	828	200	2	305	283	18	20
INDUSTRY AND BUSINESS	6,935	791	1	2,675	3,196	145	127
SELF-EMPLOYED	115	22	—	38	53	—	2
OTHER	83	14	—	37	25	2	5
NOT EMPLOYED	562	71	—	323	158	1	9
NO REPORT	81	13	—	43	21	2	2
AGRICULTURAL SCIENCES	9,526	2,367	11	2,676	4,362	63	47
EDUCATIONAL INSTITUTIONS	2,833	1,534	3	945	347	1	3
FEDERAL GOVERNMENT	3,295	437	—	820	2,001	17	20
OTHER GOVERNMENT	1,440	80	2	396	938	14	10
MILITARY	47	1	—	14	32	—	—
NONPROFIT ORGANIZATIONS	99	42	—	33	23	—	1
INDUSTRY AND BUSINESS	1,382	194	3	328	825	22	10
SELF-EMPLOYED	174	14	2	47	107	4	—
OTHER	36	14	—	14	6	2	—
NOT EMPLOYED	160	39	—	62	56	1	2
NO REPORT	60	12	1	17	27	2	1

TABLE A-3.-NUMBER OF SCIENTISTS, BY FIELD, TYPE OF EMPLOYER, AND HIGHEST DEGREE, 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND TYPE OF EMPLOYER	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
BIOLOGICAL SCIENCES	27,135	13,355	5,408	5,028	3,172	71	101
EDUCATIONAL INSTITUTIONS	15,872	8,754	2,730	2,946	1,386	11	45
FEDERAL GOVERNMENT	2,916	1,465	340	567	525	11	8
OTHER GOVERNMENT	1,203	380	231	325	253	9	5
MILITARY	790	244	424	82	38	—	2
NONPROFIT ORGANIZATIONS	1,775	676	811	147	117	9	15
INDUSTRY AND BUSINESS	2,720	1,388	303	484	509	21	15
SELF-EMPLOYED	647	110	440	27	58	9	3
OTHER	202	81	49	39	33	—	—
NOT EMPLOYED	839	207	49	356	223	1	3
NO REPORT	171	50	31	55	30	—	5
PSYCHOLOGY	16,804	10,843	52	5,464	417	4	24
EDUCATIONAL INSTITUTIONS	8,162	5,818	15	2,208	115	—	6
FEDERAL GOVERNMENT	1,378	1,044	4	295	33	1	1
OTHER GOVERNMENT	1,901	882	2	951	63	—	3
MILITARY	230	104	2	110	12	2	—
NONPROFIT ORGANIZATIONS	1,574	966	8	561	37	—	2
INDUSTRY AND BUSINESS	1,362	735	2	534	88	1	2
SELF-EMPLOYED	1,144	831	17	267	25	—	4
OTHER	274	140	2	127	4	—	1
NOT EMPLOYED	658	262	—	356	37	—	3
NO REPORT	121	61	—	55	3	—	2
STATISTICS	2,843	804	3	1,133	810	43	50
EDUCATIONAL INSTITUTIONS	778	495	—	246	32	—	5
FEDERAL GOVERNMENT	568	77	—	230	234	17	10
OTHER GOVERNMENT	122	15	—	52	53	1	1
MILITARY	31	5	1	20	5	—	—
NONPROFIT ORGANIZATIONS	139	43	1	60	30	3	2
INDUSTRY AND BUSINESS	1,055	144	—	455	416	18	22
SELF-EMPLOYED	25	6	1	8	7	2	1
OTHER	38	8	—	15	11	—	4
NOT EMPLOYED	66	5	—	38	18	2	3
NO REPORT	21	6	—	9	4	—	2
ECONOMICS	12,143	5,091	2	4,204	2,613	90	143
EDUCATIONAL INSTITUTIONS	5,061	3,440	2	1,433	151	1	34
FEDERAL GOVERNMENT	1,274	450	—	563	249	5	7
OTHER GOVERNMENT	284	82	—	136	57	2	7
MILITARY	83	14	—	43	25	—	1
NONPROFIT ORGANIZATIONS	465	216	—	191	51	3	4
INDUSTRY AND BUSINESS	3,967	548	—	1,409	1,885	61	64
SELF-EMPLOYED	195	41	—	69	70	9	6
OTHER	207	95	—	81	26	—	5
NOT EMPLOYED	510	176	—	239	82	6	7
NO REPORT	97	29	—	40	17	3	8
SOCIOLOGY	2,703	2,179	9	434	65	3	13
EDUCATIONAL INSTITUTIONS	2,080	1,789	4	265	18	—	4
FEDERAL GOVERNMENT	137	84	1	39	12	—	1
OTHER GOVERNMENT	115	57	1	45	10	—	2
MILITARY	10	7	1	1	1	—	—
NONPROFIT ORGANIZATIONS	160	120	1	33	6	—	—
INDUSTRY AND BUSINESS	55	19	—	17	15	1	3
SELF-EMPLOYED	20	14	—	4	—	1	1
OTHER	21	12	1	7	—	—	1
NOT EMPLOYED	97	69	—	23	3	1	1
NO REPORT	8	8	—	—	—	—	—
LINGUISTICS	1,351	729	2	407	162	1	50
EDUCATIONAL INSTITUTIONS	930	624	—	225	49	—	32
FEDERAL GOVERNMENT	72	24	1	28	15	—	4
OTHER GOVERNMENT	25	10	—	8	6	1	—
MILITARY	1	—	—	—	1	—	—
NONPROFIT ORGANIZATIONS	100	24	1	34	37	—	4
INDUSTRY AND BUSINESS	64	17	—	29	14	—	4
SELF-EMPLOYED	4	1	—	1	2	—	—
OTHER	10	2	—	7	1	—	—
NOT EMPLOYED	126	21	—	69	33	—	3
NO REPORT	19	6	—	6	4	—	3
OTHER FIELDS	20,770	3,269	34	6,865	10,171	217	214
EDUCATIONAL INSTITUTIONS	5,028	1,538	6	2,385	1,076	5	18
FEDERAL GOVERNMENT	1,553	174	—	422	904	33	20
OTHER GOVERNMENT	458	44	2	172	225	7	8
MILITARY	678	29	4	183	357	4	1
NONPROFIT ORGANIZATIONS	524	140	6	180	191	4	3
INDUSTRY AND BUSINESS	11,074	1,172	11	2,990	6,616	145	140
SELF-EMPLOYED	359	49	1	95	206	5	3
OTHER	124	15	2	38	67	1	1
NOT EMPLOYED	979	104	2	360	484	11	18
NO REPORT	93	4	—	40	45	2	2

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-4.-NUMBER OF SCIENTISTS, BY FIELD, WORK ACTIVITY, AND HIGHEST DEGREE, 1964

SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ALL FIELDS	223,854	79,372	5,925	61,222	72,364	2,878	2,093
RESEARCH AND DEVELOPMENT (A)	77,699	31,674	2,609	20,380	22,002	488	546
BASIC RESEARCH	35,781	20,343	1,426	7,282	6,434	112	184
APPLIED RESEARCH	30,280	10,362	1,174	9,768	8,563	206	207
MANAGEMENT OR ADMINISTRATION (B)	46,255	15,244	885	11,237	17,565	771	553
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	24,568	10,732	552	5,788	7,002	242	252
TEACHING	41,209	22,673	888	12,875	4,604	27	142
PRODUCTION AND INSPECTION	16,582	723	14	3,494	11,731	332	288
OTHER	26,301	5,430	1,173	8,030	10,315	1,012	341
NOT EMPLOYED	9,617	1,781	61	3,555	3,986	128	106
NO REPORT	6,191	1,847	295	1,651	2,161	120	117
CHEMISTRY	63,053	21,789	368	12,229	27,377	590	700
RESEARCH AND DEVELOPMENT (A)	27,645	11,033	283	5,573	10,373	167	216
BASIC RESEARCH	12,472	6,924	233	2,056	3,162	37	60
APPLIED RESEARCH	10,607	3,681	50	2,477	4,211	92	96
MANAGEMENT OR ADMINISTRATION (B)	13,125	5,097	26	2,420	5,275	134	173
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	8,740	4,216	18	1,578	2,763	70	95
TEACHING	5,798	3,641	16	1,194	923	4	20
PRODUCTION AND INSPECTION	9,485	457	3	1,504	7,118	204	199
OTHER	2,242	516	26	461	1,189	25	25
NOT EMPLOYED	3,168	592	10	765	1,738	32	31
NO REPORT	1,590	453	4	312	761	24	36
EARTH SCIENCES	17,907	3,578	1	5,829	8,101	254	144
RESEARCH AND DEVELOPMENT (A)	2,826	1,067	—	985	740	18	16
BASIC RESEARCH	1,696	766	—	543	359	14	14
APPLIED RESEARCH	1,112	298	—	439	369	4	2
MANAGEMENT OR ADMINISTRATION (B)	2,614	478	—	694	1,352	56	34
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	964	297	—	285	357	13	12
TEACHING	2,545	1,383	1	820	333	2	6
PRODUCTION AND INSPECTION	939	37	—	286	592	16	8
OTHER	7,392	427	—	2,542	4,243	120	60
NOT EMPLOYED	962	115	—	318	495	25	9
NO REPORT	629	71	—	184	346	17	11
METEOROLOGY	5,510	479	—	1,137	2,524	1,147	223
RESEARCH AND DEVELOPMENT (A)	1,043	264	—	377	342	44	16
BASIC RESEARCH	519	203	—	154	131	22	9
APPLIED RESEARCH	505	60	—	219	198	21	7
MANAGEMENT OR ADMINISTRATION (B)	1,265	90	—	307	596	230	42
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	346	67	—	116	134	21	8
TEACHING	222	92	—	65	51	12	2
PRODUCTION AND INSPECTION	68	1	—	10	42	13	2
OTHER	2,596	13	—	313	1,369	757	144
NOT EMPLOYED	140	2	—	27	56	46	9
NO REPORT	176	17	—	38	68	45	8
PHYSICS	26,698	10,286	30	8,352	7,673	185	172
RESEARCH AND DEVELOPMENT (A)	14,345	5,704	14	4,240	4,206	95	86
BASIC RESEARCH	8,040	4,260	4	2,116	1,613	20	27
APPLIED RESEARCH	4,244	1,231	4	1,496	1,446	36	31
MANAGEMENT OR ADMINISTRATION (B)	4,018	1,714	1	987	1,226	61	29
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	3,083	1,436	1	770	821	35	20
TEACHING	5,368	2,415	3	2,001	931	3	15
PRODUCTION AND INSPECTION	221	6	—	40	160	6	9
OTHER	775	168	7	245	331	11	13
NOT EMPLOYED	1,350	118	—	619	603	2	8
NO REPORT	621	161	5	220	216	7	12
MATHEMATICS	17,411	4,603	5	7,464	4,917	210	212
RESEARCH AND DEVELOPMENT (A)	5,587	1,549	—	2,135	1,764	73	66
BASIC RESEARCH	1,659	995	—	475	166	5	18
APPLIED RESEARCH	2,149	482	—	1,010	618	20	19
MANAGEMENT OR ADMINISTRATION (B)	3,444	644	3	1,260	1,392	68	77
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	1,916	426	3	726	690	31	40
TEACHING	5,023	2,055	—	2,600	354	1	13
PRODUCTION AND INSPECTION	1,080	32	—	396	600	33	19
OTHER	1,340	141	1	600	546	30	22
NOT EMPLOYED	562	71	—	323	158	1	9
NO REPORT	375	111	1	150	103	4	6

TABLE A-4.-NUMBER OF SCIENTISTS, BY FIELD, WORK ACTIVITY, AND HIGHEST DEGREE, 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
AGRICULTURAL SCIENCES	9,526	2,367	11	2,676	4,362	63	47
RESEARCH AND DEVELOPMENT (A)	2,729	1,189	3	954	571	8	4
BASIC RESEARCH	847	392	1	276	177	—	1
APPLIED RESEARCH	1,812	791	2	657	351	8	3
MANAGEMENT OR ADMINISTRATION (B)	4,287	519	2	920	2,775	38	33
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	1,136	398	2	323	398	10	5
TEACHING	893	430	1	339	120	1	2
PRODUCTION AND INSPECTION	257	14	—	69	166	7	1
OTHER	835	86	4	235	501	6	3
NOT EMPLOYED	160	39	—	62	56	1	2
NO REPORT	365	90	1	97	173	2	2
BIOLOGICAL SCIENCES	27,135	13,355	5,408	5,028	3,172	71	101
RESEARCH AND DEVELOPMENT (A)	10,980	6,061	2,284	1,608	964	18	45
BASIC RESEARCH	7,368	4,586	1,178	1,005	559	9	31
APPLIED RESEARCH	3,531	1,454	1,104	584	370	6	13
MANAGEMENT OR ADMINISTRATION (B)	4,110	2,119	822	583	538	30	18
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	2,492	1,533	514	237	195	4	9
TEACHING	7,785	4,143	857	1,904	864	2	15
PRODUCTION AND INSPECTION	348	34	11	117	175	8	3
OTHER	2,087	374	1,104	305	288	6	10
NOT EMPLOYED	839	207	49	356	223	1	3
NO REPORT	986	417	281	155	120	6	7
PSYCHOLOGY	16,804	10,843	52	5,464	417	4	24
RESEARCH AND DEVELOPMENT (A)	4,108	2,329	18	1,660	96	—	5
BASIC RESEARCH	1,397	1,156	9	200	29	—	3
APPLIED RESEARCH	2,595	1,114	8	1,409	62	—	2
MANAGEMENT OR ADMINISTRATION (B)	2,849	1,899	6	849	91	3	1
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	1,079	807	6	243	22	1	—
TEACHING	3,670	3,085	4	531	47	—	3
PRODUCTION AND INSPECTION	11	1	—	1	8	—	1
OTHER	5,148	3,077	23	1,912	125	1	10
NOT EMPLOYED	658	262	—	356	37	—	3
NO REPORT	360	190	1	155	13	—	1
STATISTICS	2,843	804	3	1,133	810	43	50
RESEARCH AND DEVELOPMENT (A)	854	252	2	370	205	11	14
BASIC RESEARCH	170	101	—	40	21	3	5
APPLIED RESEARCH	552	141	2	267	130	5	7
MANAGEMENT OR ADMINISTRATION (B)	694	144	1	260	256	18	15
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	346	96	—	147	91	5	7
TEACHING	484	323	—	143	16	—	2
PRODUCTION AND INSPECTION	374	13	—	140	204	9	8
OTHER	289	51	—	144	88	1	5
NOT EMPLOYED	66	5	—	38	18	2	3
NO REPORT	82	16	—	38	23	2	3
ECONOMICS	12,143	5,091	2	4,204	2,613	90	143
RESEARCH AND DEVELOPMENT (A)	1,927	986	1	740	181	3	16
BASIC RESEARCH	584	369	—	168	42	—	5
APPLIED RESEARCH	1,296	615	1	556	114	1	9
MANAGEMENT OR ADMINISTRATION (B)	3,534	1,089	1	1,145	1,197	51	51
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	1,288	559	1	418	276	18	16
TEACHING	3,469	2,368	—	968	108	—	25
PRODUCTION AND INSPECTION	1,215	72	—	425	690	14	14
OTHER	1,091	234	—	545	282	13	17
NOT EMPLOYED	510	176	—	239	82	6	7
NO REPORT	397	166	—	142	73	3	13
SOCIOLOGY	2,703	2,179	9	434	65	3	13
RESEARCH AND DEVELOPMENT (A)	593	479	—	93	18	—	3
BASIC RESEARCH	380	336	—	34	8	—	2
APPLIED RESEARCH	209	143	—	59	7	—	—
MANAGEMENT OR ADMINISTRATION (B)	440	333	4	81	17	1	4
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	247	194	1	43	7	1	1
TEACHING	1,406	1,191	4	198	11	—	2
PRODUCTION AND INSPECTION	9	—	—	3	5	—	1
OTHER	92	50	1	28	10	1	2
NOT EMPLOYED	97	69	—	23	3	1	1
NO REPORT	66	57	—	8	1	—	—

TABLE A-4.-NUMBER OF SCIENTISTS, BY FIELD, WORK ACTIVITY, AND HIGHEST DEGREE, 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
LINGUISTICS	1,351	729	2	407	162	1	50
RESEARCH AND DEVELOPMENT (A)	214	94	—	70	43	—	7
BASIC RESEARCH	132	68	—	36	23	—	5
APPLIED RESEARCH	77	26	—	33	17	—	1
MANAGEMENT OR ADMINISTRATION (B)	171	100	1	47	21	—	2
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	64	41	—	15	7	—	1
TEACHING	695	463	—	177	29	—	26
PRODUCTION AND INSPECTION	4	—	—	—	2	1	1
OTHER	81	28	—	30	18	—	5
NOT EMPLOYED	126	21	—	69	33	—	3
NO REPORT	60	23	1	14	16	—	6
OTHER FIELDS	20,770	3,269	34	6,865	10,171	217	214
RESEARCH AND DEVELOPMENT (A)	4,848	667	4	1,575	2,499	51	52
BASIC RESEARCH	517	187	1	179	144	2	4
APPLIED RESEARCH	1,591	326	3	562	670	13	17
MANAGEMENT OR ADMINISTRATION (B)	5,704	1,018	18	1,684	2,829	81	74
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	2,867	662	6	887	1,241	33	38
TEACHING	3,851	1,084	2	1,935	817	2	11
PRODUCTION AND INSPECTION	2,571	56	—	503	1,969	21	22
OTHER	2,333	265	7	670	1,325	41	25
NOT EMPLOYED	979	104	2	360	484	11	18
NO REPORT	484	75	1	138	248	10	12

(A) INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B) INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-5.-NUMBER OF SCIENTISTS, BY FIELD, YEARS OF PROFESSIONAL EXPERIENCE, AND HIGHEST DEGREE, 1964

SCIENTIFIC AND TECHNICAL FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ALL FIELDS	223,854	79,372	5,925	61,222	72,364	2,878	2,093
1 YEAR	8,303	2,191	97	2,258	3,737	—	20
2 TO 4	34,864	9,447	563	11,328	13,315	79	132
5 TO 9	45,249	15,610	1,054	13,751	14,200	368	266
10 TO 14	42,706	16,769	1,110	11,670	12,305	498	354
15 TO 19	26,304	9,837	913	6,522	8,099	603	330
20 OR MORE	53,778	22,446	1,905	11,846	15,481	1,219	881
NO REPORT	12,650	3,072	283	3,847	5,227	111	110
CHEMISTRY	63,053	21,789	368	12,229	27,377	590	700
1 YEAR	3,291	862	6	512	1,898	—	13
2 TO 4	9,242	2,832	65	1,711	4,595	8	31
5 TO 9	10,812	4,182	88	2,087	4,383	28	44
10 TO 14	11,218	4,155	81	2,400	4,388	78	116
15 TO 19	6,862	2,283	54	1,403	2,941	75	106
20 OR MORE	17,008	6,468	58	3,118	6,609	389	366
NO REPORT	4,620	1,007	16	998	2,563	12	24
EARTH SCIENCES	17,907	3,578	1	5,829	8,101	254	144
1 YEAR	781	92	—	314	374	—	1
2 TO 4	2,157	423	—	993	728	3	10
5 TO 9	3,399	657	1	1,435	1,283	16	7
10 TO 14	4,093	746	—	1,258	2,047	21	21
15 TO 19	2,403	442	—	561	1,325	52	23
20 OR MORE	3,800	1,108	—	857	1,642	133	60
NO REPORT	1,274	110	—	411	702	29	22
METEOROLOGY	5,510	479	—	1,137	2,524	1,147	223
1 YEAR	149	8	—	19	120	—	2
2 TO 4	708	44	—	130	497	29	8
5 TO 9	941	81	—	211	473	154	22
10 TO 14	1,019	111	—	222	361	271	54
15 TO 19	988	64	—	154	362	346	62
20 OR MORE	1,506	161	—	346	619	313	67
NO REPORT	199	10	—	55	92	34	8
PHYSICS	26,698	10,286	30	8,352	7,673	185	172
1 YEAR	1,265	345	1	458	459	—	2
2 TO 4	6,507	1,586	3	2,231	2,656	7	24
5 TO 9	6,043	2,330	4	1,937	1,712	34	26
10 TO 14	4,634	2,261	15	1,340	969	29	20
15 TO 19	2,382	1,163	3	654	505	34	23
20 OR MORE	4,484	2,404	3	1,160	776	77	64
NO REPORT	1,383	197	1	572	596	4	13
MATHEMATICS	17,411	4,603	5	7,464	4,917	210	212
1 YEAR	246	160	—	43	43	—	—
2 TO 4	3,262	592	—	1,797	837	20	16
5 TO 9	5,328	963	2	2,195	2,000	91	77
10 TO 14	3,630	1,025	1	1,469	1,054	32	49
15 TO 19	1,670	536	—	719	372	23	20
20 OR MORE	2,729	1,155	2	1,021	472	35	44
NO REPORT	546	172	—	220	139	9	6
AGRICULTURAL SCIENCES	9,526	2,367	11	2,676	4,362	63	47
1 YEAR	189	38	—	93	58	—	—
2 TO 4	1,451	196	2	427	816	4	6
5 TO 9	2,008	428	1	581	984	5	9
10 TO 14	1,923	514	1	534	856	9	9
15 TO 19	1,309	403	2	348	538	9	9
20 OR MORE	2,337	725	4	578	984	35	11
NO REPORT	309	63	1	115	126	1	3
BIOLOGICAL SCIENCES	27,135	13,355	5,408	5,028	3,172	71	101
1 YEAR	708	299	89	218	102	—	—
2 TO 4	4,007	1,453	484	1,083	979	2	6
5 TO 9	5,468	2,710	944	1,155	641	1	17
10 TO 14	5,128	2,898	997	804	404	9	16
15 TO 19	3,183	1,586	842	442	289	8	16
20 OR MORE	7,344	3,934	1,792	981	549	47	41
NO REPORT	1,297	475	260	345	208	4	5
PSYCHOLOGY	16,804	10,843	52	5,464	417	4	24
1 YEAR	337	184	1	136	16	—	—
2 TO 4	2,347	1,231	6	1,023	84	—	3
5 TO 9	3,720	2,214	12	1,417	76	—	1
10 TO 14	3,952	2,752	7	1,124	67	—	2
15 TO 19	2,162	1,498	5	614	43	2	—
20 OR MORE	3,321	2,407	19	785	95	2	13
NO REPORT	965	557	2	365	36	—	5

TABLE A-5.-NUMBER OF SCIENTISTS, BY FIELD, YEARS OF PROFESSIONAL EXPERIENCE, AND HIGHEST DEGREE, 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
STATISTICS	2,843	804	3	1,133	810	43	50
1 YEAR	22	15	—	4	3	—	—
2 TO 4	422	102	—	238	80	1	1
5 TO 9	668	167	1	277	202	8	13
10 TO 14	620	172	—	243	186	11	8
15 TO 19	411	132	1	138	125	5	10
20 OR MORE	609	194	1	195	187	18	14
NO REPORT	91	22	—	38	27	—	4
ECONOMICS	12,143	5,091	2	4,204	2,613	90	143
1 YEAR	372	87	—	232	52	—	1
2 TO 4	1,446	473	—	722	243	—	8
5 TO 9	1,993	844	—	766	369	1	13
10 TO 14	2,078	917	2	697	444	7	11
15 TO 19	1,729	842	—	449	400	17	21
20 OR MORE	3,720	1,686	—	954	943	61	76
NO REPORT	805	242	—	384	162	4	13
SOCIOLOGY	2,703	2,179	9	434	65	3	13
1 YEAR	35	27	—	6	2	—	—
2 TO 4	255	231	2	16	4	1	1
5 TO 9	608	420	1	170	15	1	1
10 TO 14	579	462	—	108	6	—	3
15 TO 19	394	332	2	45	12	—	3
20 OR MORE	739	631	4	81	17	1	5
NO REPORT	93	76	—	8	9	—	—
LINGUISTICS	1,351	729	2	407	162	1	50
1 YEAR	45	10	—	25	10	—	—
2 TO 4	210	54	—	104	47	—	5
5 TO 9	316	144	—	123	44	—	5
10 TO 14	257	160	2	69	12	—	14
15 TO 19	140	103	—	23	8	—	6
20 OR MORE	285	224	—	29	13	1	18
NO REPORT	98	34	—	34	28	—	2
OTHER FIELDS	20,770	3,269	34	6,865	10,171	217	214
1 YEAR	863	64	—	198	600	—	1
2 TO 4	2,850	230	1	853	1,749	4	13
5 TO 9	3,945	470	—	1,397	2,018	29	31
10 TO 14	3,575	596	4	1,402	1,511	31	31
15 TO 19	2,671	453	4	972	1,179	32	31
20 OR MORE	5,896	1,349	22	1,741	2,575	107	102
NO REPORT	970	107	3	302	539	14	5

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-6.-NUMBER OF SCIENTISTS, BY FIELD, AGE AND TYPE OF EMPLOYER, 1964

SCIENTIFIC AND TECHNICAL FIELD AND AGE	TOTAL	TYPE OF EMPLOYER								NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER		
ALL FIELDS	223,854	77,727	23,405	7,472	5,522	8,722	84,421	4,277	1,434	9,617	1,257
20-24	8,247	3,844	324	136	464	111	1,781	13	31	1,370	173
25-29	34,102	13,043	2,670	929	1,483	972	11,495	100	172	2,878	360
30-34	39,896	14,159	3,848	1,292	1,067	1,654	15,845	308	228	1,317	178
35-39	40,148	13,017	4,051	1,424	825	1,875	17,109	751	234	727	135
40-44	35,831	11,229	4,020	1,294	884	1,609	15,137	843	257	464	94
45-49	24,726	7,796	3,255	833	541	972	10,152	659	163	266	89
50-54	16,921	5,626	2,381	649	174	659	6,503	538	141	183	67
55-59	11,308	4,236	1,691	477	66	430	3,670	396	86	206	50
60-64	6,966	2,917	763	269	15	259	1,988	288	71	351	45
65-69	3,428	1,367	311	127	1	101	466	212	31	784	28
70 AND OVER	1,992	369	51	31	------	73	205	162	17	1,054	30
NO REPORT	289	124	40	11	2	7	70	7	3	17	8
CHEMISTRY	63,053	13,616	4,004	888	648	1,679	37,859	589	311	3,168	291
20-24	3,841	1,703	103	52	166	55	1,028	2	19	623	90
25-29	10,355	3,155	497	150	303	205	4,937	8	40	954	106
30-34	10,157	2,346	584	128	70	297	6,320	20	50	307	35
35-39	10,357	1,826	712	148	20	346	7,030	58	48	156	13
40-44	9,687	1,518	682	130	42	307	6,742	93	53	107	13
45-49	7,294	1,067	563	89	28	196	5,152	96	35	58	10
50-54	4,918	718	383	78	13	112	3,437	95	27	48	7
55-59	2,994	542	258	56	6	80	1,890	77	18	62	5
60-64	1,878	457	139	26	------	46	1,002	66	12	126	4
65-69	943	228	72	28	------	17	213	40	5	338	2
70 AND OVER	594	49	10	3	------	16	83	34	4	389	6
NO REPORT	35	7	1	------	------	2	25	------	-----	-----	-----
EARTH SCIENCES	17,907	4,023	2,325	658	241	216	8,400	821	87	962	174
20-24	658	334	22	26	46	6	49	------	2	146	27
25-29	2,141	788	192	97	96	26	615	15	13	245	54
30-34	3,317	828	386	142	25	53	1,640	74	16	129	24
35-39	3,752	584	446	141	20	29	2,243	185	13	78	13
40-44	3,098	507	470	111	29	35	1,661	203	14	51	17
45-49	1,799	345	309	55	20	22	900	108	7	24	9
50-54	1,206	221	205	40	2	19	598	80	11	22	8
55-59	876	184	184	24	3	17	369	54	7	27	7
60-64	532	133	71	12	------	7	204	44	3	53	5
65-69	332	78	27	9	------	2	77	41	-----	93	5
70 AND OVER	177	17	9	1	------	------	36	17	1	91	5
NO REPORT	19	4	4	------	------	------	8	------	-----	3	-----
METEOROLOGY	5,510	527	1,857	78	2,113	152	594	18	16	140	15
20-24	118	34	10	1	58	------	7	------	-----	7	1
25-29	677	116	135	8	295	25	66	1	1	26	4
30-34	968	89	250	10	473	31	100	1	1	13	-----
35-39	892	66	232	8	464	24	89	------	3	3	3
40-44	1,166	96	351	24	489	31	134	3	6	32	-----
45-49	978	64	424	14	283	29	118	7	3	32	4
50-54	384	25	231	8	46	9	54	3	2	5	1
55-59	228	24	172	2	4	3	15	2	-----	6	-----
60-64	62	7	41	3	------	------	8	------	-----	3	-----
65-69	25	5	9	------	------	------	2	1	-----	6	2
70 AND OVER	11	1	2	------	------	------	1	------	-----	7	-----
NO REPORT	1	------	------	------	1	------	------	------	-----	-----	-----
PHYSICS	26,698	11,611	2,913	89	473	1,011	8,954	166	25	1,350	106
20-24	1,563	947	90	1	42	21	156	------	-----	291	20
25-29	6,686	3,249	602	23	205	200	1,698	9	7	642	51
30-34	5,730	2,347	621	26	100	233	2,187	14	8	179	15
35-39	4,409	1,616	528	11	55	207	1,874	22	5	81	10
40-44	3,528	1,303	437	5	37	169	1,498	28	3	44	4
45-49	1,793	687	257	9	30	72	692	23	1	18	4
50-54	1,191	547	164	7	4	52	382	18	1	16	-----
55-59	865	414	115	2	------	28	272	22	-----	12	-----
60-64	604	330	71	5	------	19	149	11	-----	17	2
65-69	224	129	22	------	------	5	31	8	-----	29	-----
70 AND OVER	85	35	4	------	------	4	10	11	-----	21	-----
NO REPORT	15	7	2	------	------	1	5	------	-----	-----	-----
MATHEMATICS	17,411	7,206	1,113	211	277	828	6,935	115	83	562	•1
20-24	343	192	18	2	13	7	70	1	3	29	8
25-29	3,703	1,567	174	34	73	140	1,446	10	19	209	31
30-34	4,304	1,555	252	38	58	222	1,992	15	16	145	11
35-39	3,439	1,156	229	35	54	191	1,650	27	15	74	8
40-44	2,252	845	185	27	54	130	933	26	14	34	4
45-49	1,301	612	112	15	19	72	430	14	4	18	5
50-54	882	494	95	17	4	31	221	7	6	4	3
55-59	601	393	30	22	1	22	114	6	3	6	4
60-64	359	246	13	12	1	9	63	5	3	3	4
65-69	165	114	3	6	------	1	8	2	-----	29	2
70 AND OVER	56	32	1	3	------	3	3	2	-----	11	1
NO REPORT	6	------	1	------	------	------	5	------	-----	-----	-----

TABLE A-6.-NUMBER OF SCIENTISTS, BY FIELD, AGE AND TYPE OF EMPLOYER, 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND AGE	TOTAL	TYPE OF EMPLOYER								NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER		
AGRICULTURAL SCIENCES	9,526	2,833	3,295	1,440	47	99	1,382	174	36	160	60
20-24	133	35	40	25	5	------	13	4	------	8	3
25-29	1,279	319	458	241	32	8	146	17	7	38	13
30-34	1,700	465	623	288	4	16	240	20	1	34	9
35-39	1,574	400	548	280	2	13	276	30	4	18	3
40-44	1,621	514	490	251	2	20	298	28	8	4	6
45-49	1,241	451	375	161	------	15	201	22	4	3	9
50-54	874	267	372	90	1	13	104	18	2	------	7
55-59	590	193	250	59	1	6	56	12	1	7	5
60-64	280	106	92	30	------	4	26	10	3	6	3
65-69	133	59	26	10	------	1	8	6	2	19	2
70 AND OVER	55	11	1	1	------	3	7	6	3	23	------
NO REPORT	46	13	20	4	------	------	7	1	1	------	------
BIOLOGICAL SCIENCES	27,135	15,872	2,916	1,203	790	1,775	2,720	647	202	839	171
20-24	351	252	9	10	4	9	14	------	1	47	5
25-29	2,800	1,670	212	132	126	131	182	13	22	277	35
30-34	4,513	2,717	463	183	188	257	397	47	42	187	32
35-39	5,347	3,218	560	187	112	389	623	111	25	95	27
40-44	4,514	2,621	518	180	121	307	582	110	24	37	14
45-49	3,332	1,888	401	153	107	240	371	108	24	20	20
50-54	2,436	1,363	274	118	80	184	276	95	20	17	9
55-59	1,827	1,047	253	130	39	112	152	65	11	11	7
60-64	1,160	660	149	66	11	90	76	53	19	24	12
65-69	531	315	58	31	1	36	28	25	8	25	4
70 AND OVER	247	71	11	11	------	19	13	18	4	97	3
NO REPORT	77	50	8	2	1	1	6	2	2	2	3
PSYCHOLOGY	16,804	8,162	1,378	1,901	230	1,574	1,362	1,144	274	658	121
20-24	35	17	4	3	------	2	3	------	------	5	1
25-29	1,220	603	86	143	72	112	92	3	16	82	11
30-34	2,838	1,455	203	348	47	310	246	79	32	102	16
35-39	3,739	1,816	305	455	32	384	332	242	57	94	22
40-44	3,299	1,513	276	392	41	341	333	269	59	58	17
45-49	2,047	1,016	204	198	24	159	170	189	36	43	8
50-54	1,493	730	153	162	11	124	109	143	31	15	15
55-59	984	510	95	107	2	72	45	98	21	23	11
60-64	589	325	34	59	1	37	26	51	14	37	5
65-69	290	120	14	23	------	19	3	40	6	61	4
70 AND OVER	237	39	3	8	------	12	3	27	2	136	7
NO REPORT	33	18	1	3	------	2	------	3	------	2	4
STATISTICS	2,843	778	568	122	31	139	1,055	25	38	66	21
20-24	22	11	------	------	1	------	7	------	------	3	------
25-29	377	118	39	8	13	17	151	1	3	23	4
30-34	572	174	52	20	7	33	255	3	8	14	6
35-39	543	132	89	19	3	38	244	3	5	4	6
40-44	462	118	93	19	4	19	192	6	7	3	1
45-49	379	98	129	17	2	19	97	3	8	4	2
50-54	228	50	88	19	1	5	54	4	3	4	------
55-59	151	40	56	10	------	4	35	3	1	2	------
60-64	80	27	17	9	------	3	18	2	1	3	------
65-69	16	5	3	------	------	1	1	------	1	4	1
70 AND OVER	12	5	2	1	------	------	1	------	1	1	1
NO REPORT	1	------	------	------	------	------	------	------	------	1	------
ECONOMICS	12,143	5,061	1,274	284	83	465	3,967	195	207	510	97
20-24	148	51	6	3	12	1	33	2	3	35	2
25-29	1,130	469	73	24	32	33	366	12	18	87	16
30-34	1,905	871	192	37	8	86	610	9	33	44	15
35-39	1,934	799	163	44	11	85	740	21	24	30	17
40-44	2,151	925	197	48	9	83	776	26	49	25	13
45-49	1,680	664	203	42	10	60	624	33	23	15	6
50-54	1,210	471	195	43	1	49	382	19	24	17	9
55-59	835	345	129	18	------	40	246	22	17	13	5
60-64	538	253	64	16	------	16	130	18	9	28	4
65-69	353	157	47	6	------	8	41	17	6	65	6
70 AND OVER	238	45	3	1	------	4	16	16	1	148	4
NO REPORT	21	11	2	2	------	------	3	------	------	3	------
SOCIOLOGY	2,703	2,080	137	115	10	160	55	20	21	97	8
20-24	6	3	1	------	------	------	------	------	------	2	------
25-29	92	70	3	------	1	6	5	------	1	4	2
30-34	355	284	18	14	2	17	9	1	1	9	------
35-39	513	396	28	22	3	26	15	3	7	11	2
40-44	517	408	19	29	3	36	10	------	1	10	1
45-49	414	331	19	21	1	25	7	4	3	2	1
50-54	311	236	24	15	------	16	5	4	5	6	------
55-59	191	145	15	6	------	17	2	3	2	1	------
60-64	144	112	6	5	------	11	2	2	1	4	1
65-69	85	65	4	3	------	1	------	1	------	11	------
70 AND OVER	73	28	------	------	------	5	------	2	------	37	1
NO REPORT	2	2	------	------	------	------	------	------	------	------	------

TABLE A-6.-NUMBER OF SCIENTISTS, BY FIELD, AGE AND TYPE OF EMPLOYER, 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND AGE	TOTAL	TYPE OF EMPLOYER								NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER		
LINGUISTICS	1,351	930	72	25	1	100	64	4	10	126	19
20-24	26	11	------	1	------	------	1	------	------	13	------
25-29	162	91	3	7	------	11	8	------	1	34	7
30-34	239	149	14	3	1	28	15	1	1	26	1
35-39	274	189	10	3	------	32	14	------	4	19	3
40-44	215	153	14	2	------	14	13	1	2	16	------
45-49	132	103	12	2	------	6	4	------	1	2	2
50-54	120	96	8	2	------	6	4	------	------	2	2
55-59	92	71	9	4	------	1	2	------	------	3	2
60-64	52	42	2	1	------	2	3	1	------	------	1
65-69	20	15	------	------	------	------	------	1	1	3	------
70 AND OVER	13	6	------	------	------	------	------	------	------	6	1
NO REPORT	6	4	------	------	------	------	------	------	------	2	------
OTHER FIELDS	20,770	5,028	1,553	458	578	524	11,074	359	124	979	93
20-24	998	254	21	12	117	10	400	4	3	161	16
25-29	3,480	828	196	62	235	58	1,783	11	24	257	26
30-34	3,298	879	190	55	84	71	1,834	24	19	128	14
35-39	3,375	819	201	71	49	111	1,979	49	24	64	8
40-44	3,321	708	288	76	53	117	1,965	50	17	43	4
45-49	2,336	470	247	57	17	57	1,386	52	14	27	9
50-54	1,668	408	189	50	11	39	877	52	9	27	6
55-59	1,074	328	125	37	10	28	472	32	5	33	4
60-64	688	219	64	25	2	15	281	25	6	47	4
65-69	311	77	26	11	------	10	54	30	2	101	------
70 AND OVER	194	30	5	2	------	7	32	29	1	87	1
NO REPORT	27	8	1	------	------	1	11	1	------	4	1

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-7.-NUMBER OF SCIENTISTS, BY FIELD, WORK ACTIVITY AND TYPE OF EMPLOYER, 1964

SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY	TOTAL	TYPE OF EMPLOYER								NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER		
ALL FIELDS	223,854	77,727	23,405	7,472	5,522	8,722	84,421	4,277	1,434	9,617	1,257
RESEARCH AND DEVELOPMENT (A)	77,699	26,392	10,242	2,006	999	4,344	32,741	343	478	------	154
BASIC RESEARCH	35,781	19,894	5,002	779	531	2,334	6,863	80	210	------	88
APPLIED RESEARCH	30,280	6,047	4,535	1,148	405	1,739	15,924	194	231	------	57
MANAGEMENT OR ADMINISTRATION (B)	46,255	5,778	7,442	2,528	1,854	2,086	25,563	569	347	------	88
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	24,568	2,793	3,846	908	631	1,257	14,722	203	171	------	37
TEACHING	41,209	39,926	203	302	242	154	170	34	98	------	80
PRODUCTION AND INSPECTION	16,582	249	1,274	601	180	245	13,693	214	98	------	28
OTHER	26,301	3,325	3,654	1,798	1,909	1,689	10,602	2,865	358	------	101
NOT EMPLOYED	9,617	------	------	------	------	------	------	------	------	9,617	------
NO REPORT	6,191	2,057	590	237	338	204	1,652	252	55	------	806
CHEMISTRY	63,053	13,616	4,004	888	648	1,679	37,859	589	311	3,168	291
RESEARCH AND DEVELOPMENT (A)	27,645	6,522	2,286	296	226	1,068	17,030	57	130	------	30
BASIC RESEARCH	12,472	5,908	1,401	195	157	779	3,928	13	69	------	22
APPLIED RESEARCH	10,607	567	781	89	63	268	8,755	30	48	------	6
MANAGEMENT OR ADMINISTRATION (B)	13,125	602	857	173	169	313	10,788	139	72	------	12
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	8,740	328	638	62	55	192	7,360	64	33	------	8
TEACHING	5,798	5,678	20	17	26	12	25	3	13	------	4
PRODUCTION AND INSPECTION	9,485	109	557	300	63	111	8,189	96	51	------	9
OTHER	2,242	360	204	69	72	142	1,106	248	37	------	4
NOT EMPLOYED	3,168	------	------	------	------	------	------	------	------	3,168	------
NO REPORT	1,590	345	80	33	92	33	721	46	8	------	232
EARTH SCIENCES	17,907	4,023	2,325	658	241	216	8,400	821	87	962	174
RESEARCH AND DEVELOPMENT (A)	2,826	918	928	142	20	118	658	18	19	------	5
BASIC RESEARCH	1,696	764	537	90	5	90	180	13	15	------	2
APPLIED RESEARCH	1,112	151	388	52	15	28	466	5	4	------	3
MANAGEMENT OR ADMINISTRATION (B)	2,614	217	511	155	91	47	1,503	73	16	------	1
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	964	106	294	77	29	26	401	23	8	------	------
TEACHING	2,545	2,483	10	7	22	6	6	------	7	------	4
PRODUCTION AND INSPECTION	939	10	86	63	3	3	721	45	7	------	1
OTHER	7,392	277	718	275	63	39	5,343	624	33	------	20
NOT EMPLOYED	962	------	------	------	------	------	------	------	------	962	------
NO REPORT	629	118	72	16	42	3	169	61	5	------	143
METEOROLOGY	5,510	527	1,857	78	2,113	152	594	18	16	140	15
RESEARCH AND DEVELOPMENT (A)	1,043	276	416	21	59	98	164	3	5	------	1
BASIC RESEARCH	519	204	188	6	8	54	55	1	2	------	1
APPLIED RESEARCH	505	68	223	15	51	43	100	2	3	------	------
MANAGEMENT OR ADMINISTRATION (B)	1,265	34	467	22	576	37	122	3	4	------	------
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	346	22	153	11	64	29	64	------	3	------	------
TEACHING	222	165	12	2	37	------	4	------	1	------	
PRODUCTION AND INSPECTION	68	------	23	10	18	------	16	------	1	------	------
OTHER	2,596	35	894	20	1,360	14	260	9	4	------	------
NOT EMPLOYED	140	------	------	------	------	------	------	------	------	140	------
NO REPORT	176	17	45	3	63	3	28	3	1	------	13
PHYSICS	26,698	11,611	2,913	89	473	1,011	8,954	166	25	1,350	106
RESEARCH AND DEVELOPMENT (A)	14,345	5,380	2,015	47	119	723	5,984	44	16	------	17
BASIC RESEARCH	8,040	4,608	1,039	35	56	446	1,830	8	9	------	9
APPLIED RESEARCH	4,244	549	754	7	45	226	2,636	18	5	------	4
MANAGEMENT OR ADMINISTRATION (B)	4,018	556	692	20	209	206	2,288	41	3	------	3
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	3,083	339	618	11	102	164	1,817	27	2	------	3
TEACHING	5,368	5,259	28	4	39	16	17	1	1	------	3
PRODUCTION AND INSPECTION	221	5	29	5	6	2	169	3	2	------	------
OTHER	775	117	106	11	63	46	360	68	2	------	2
NOT EMPLOYED	1,350	------	------	------	------	------	------	------	------	1,350	------
NO REPORT	621	294	43	2	37	18	136	9	1	------	81
MATHEMATICS	17,411	7,206	1,113	211	277	828	6,935	115	83	562	81
RESEARCH AND DEVELOPMENT (A)	5,587	1,536	533	56	55	432	2,907	21	33	------	14
BASIC RESEARCH	1,659	1,148	99	24	7	83	279	2	11	------	6
APPLIED RESEARCH	2,149	316	317	21	30	226	1,206	12	13	------	8
MANAGEMENT OR ADMINISTRATION (B)	3,444	440	310	44	122	237	2,254	19	17	------	1
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	1,916	210	228	27	54	169	1,209	10	8	------	1
TEACHING	5,023	4,827	24	57	24	8	62	4	7	------	10
PRODUCTION AND INSPECTION	1,080	48	109	14	26	81	787	7	5	------	3
OTHER	1,340	209	103	31	43	60	811	60	19	------	4
NOT EMPLOYED	562	------	------	------	------	------	------	------	------	562	------
NO REPORT	375	146	34	9	7	10	114	4	2	------	49

TABLE A-7.-NUMBER OF SCIENTISTS, BY FIELD, WORK ACTIVITY AND TYPE OF EMPLOYER, 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY	TOTAL	TYPE OF EMPLOYER								NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER		
AGRICULTURAL SCIENCES - - - - -	9,526	2,833	3,295	1,440	47	99	1,382	174	36	160	60
RESEARCH AND DEVELOPMENT (A) - - - -	2,729	1,295	863	301	3	24	208	16	9	—	10
BASIC RESEARCH - - - - - - - - -	847	451	288	79	2	6	14	—	2	—	5
APPLIED RESEARCH - - - - - - - -	1,812	840	541	211	1	17	178	12	7	—	5
MANAGEMENT OR ADMINISTRATION (B) - -	4,287	401	1,919	899	19	43	901	76	14	—	15
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT - -	1,136	277	352	294	2	16	175	7	8	—	5
TEACHING - - - - - - - - - - - - - -	893	860	11	12	3	—	—	—	3	—	4
PRODUCTION AND INSPECTION - - - - -	257	20	98	56	—	3	74	3	1	—	2
OTHER - - - - - - - - - - - - - - -	835	141	297	130	10	24	150	71	5	—	7
NOT EMPLOYED - - - - - - - - - - - -	160	—	—	—	—	—	—	—	—	160	—
NO REPORT - - - - - - - - - - - - -	365	116	107	42	12	5	49	8	4	—	22
BIOLOGICAL SCIENCES - - - - - -	27,135	15,872	2,916	1,203	790	1,775	2,720	647	202	839	171
RESEARCH AND DEVELOPMENT (A) - - - -	10,980	6,257	1,691	424	371	889	1,192	51	72	—	33
BASIC RESEARCH - - - - - - - - -	7,368	4,751	1,073	237	237	609	357	22	55	—	27
APPLIED RESEARCH - - - - - - - -	3,531	1,498	609	183	132	279	779	28	17	—	6
MANAGEMENT OR ADMINISTRATION (B) - -	4,110	1,098	788	415	249	340	1,078	66	57	—	19
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT - -	2,492	645	522	148	166	179	766	21	38	—	7
TEACHING - - - - - - - - - - - - - -	7,785	7,527	34	77	18	72	6	5	24	—	22
PRODUCTION AND INSPECTION - - - - -	348	19	101	50	10	12	146	5	2	—	3
OTHER - - - - - - - - - - - - - - -	2,087	447	218	181	113	384	215	475	37	—	17
NOT EMPLOYED - - - - - - - - - - - -	839	—	—	—	—	—	—	—	—	839	—
NO REPORT - - - - - - - - - - - - -	986	524	84	56	29	78	83	45	10	—	77
PSYCHOLOGY - - - - - - - - - -	16,804	8,162	1,378	1,901	230	1,574	1,362	1,144	274	658	121
RESEARCH AND DEVELOPMENT (A) - - - -	4,108	2,080	413	488	83	452	427	64	79	—	22
BASIC RESEARCH - - - - - - - - -	1,397	918	158	64	40	120	57	12	19	—	9
APPLIED RESEARCH - - - - - - - -	2,595	1,148	244	418	40	311	313	51	58	—	12
MANAGEMENT OR ADMINISTRATION (B) - -	2,849	1,052	348	405	70	351	532	25	55	—	11
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT - -	1,079	309	173	96	42	166	270	9	12	—	2
TEACHING - - - - - - - - - - - - - -	3,670	3,527	9	65	8	21	8	13	12	—	7
PRODUCTION AND INSPECTION - - - - -	11	—	—	2	—	—	9	—	—	—	—
OTHER - - - - - - - - - - - - - - -	5,148	1,351	587	902	64	729	358	1,006	117	—	34
NOT EMPLOYED - - - - - - - - - - - -	658	—	—	—	—	—	—	—	—	658	—
NO REPORT - - - - - - - - - - - - -	360	152	21	39	5	21	28	36	11	—	47
STATISTICS - - - - - - - - - -	2,843	778	568	122	31	139	1,055	25	38	66	21
RESEARCH AND DEVELOPMENT (A) - - - -	854	179	180	54	10	84	326	7	11	—	3
BASIC RESEARCH - - - - - - - - -	170	86	21	8	4	18	29	—	2	—	2
APPLIED RESEARCH - - - - - - - -	552	89	121	37	6	56	228	6	8	—	1
MANAGEMENT OR ADMINISTRATION (B) - -	694	78	212	38	9	36	297	4	17	—	3
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT - -	346	46	93	29	3	25	139	2	8	—	1
TEACHING - - - - - - - - - - - - - -	484	462	7	4	3	1	2	—	3	—	2
PRODUCTION AND INSPECTION - - - - -	374	5	91	14	4	8	247	1	4	—	—
OTHER - - - - - - - - - - - - - - -	289	31	60	9	3	8	167	8	3	—	—
NOT EMPLOYED - - - - - - - - - - - -	66	—	—	—	—	—	—	—	—	66	—
NO REPORT - - - - - - - - - - - - -	82	23	18	3	2	2	16	5	—	—	13
ECONOMICS - - - - - - - - - - -	12,143	5,061	1,274	284	83	465	3,967	195	207	510	97
RESEARCH AND DEVELOPMENT (A) - - - -	1,927	844	418	86	5	193	284	15	73	—	9
BASIC RESEARCH - - - - - - - - -	584	367	97	18	2	56	26	1	16	—	1
APPLIED RESEARCH - - - - - - - -	1,296	477	316	68	2	136	219	13	57	—	8
MANAGEMENT OR ADMINISTRATION (B) - -	3,534	519	517	112	40	179	2,037	52	64	—	14
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT - -	1,288	188	281	72	7	111	571	14	38	—	6
TEACHING - - - - - - - - - - - - - -	3,469	3,416	11	6	15	2	4	2	6	—	7
PRODUCTION AND INSPECTION - - - - -	1,215	12	66	16	4	15	1,065	20	11	—	6
OTHER - - - - - - - - - - - - - - -	1,091	124	218	52	9	66	479	90	45	—	8
NOT EMPLOYED - - - - - - - - - - - -	510	—	—	—	—	—	—	—	—	510	—
NO REPORT - - - - - - - - - - - - -	397	146	44	12	10	10	98	16	8	—	53
SOCIOLOGY - - - - - - - - - - -	2,703	2,080	137	115	10	160	55	20	21	97	8
RESEARCH AND DEVELOPMENT (A) - - - -	593	408	59	32	2	54	19	9	8	—	2
BASIC RESEARCH - - - - - - - - -	380	305	25	14	1	19	4	6	5	—	1
APPLIED RESEARCH - - - - - - - -	209	103	33	18	1	34	13	3	3	—	1
MANAGEMENT OR ADMINISTRATION (B) - -	440	215	53	60	4	80	20	3	5	—	—
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT - -	247	111	36	33	3	46	13	2	3	—	—
TEACHING - - - - - - - - - - - - - -	1,406	1,382	3	6	1	4	1	3	6	—	—
PRODUCTION AND INSPECTION - - - - -	9	1	2	1	—	—	5	—	—	—	—
OTHER - - - - - - - - - - - - - - -	92	27	16	13	2	19	9	5	1	—	—
NOT EMPLOYED - - - - - - - - - - - -	97	—	—	—	—	—	—	—	—	97	—
NO REPORT - - - - - - - - - - - - -	66	47	4	3	1	3	1	—	1	—	6

TABLE A-7.-NUMBER OF SCIENTISTS, BY FIELD, WORK ACTIVITY AND TYPE OF EMPLOYER, 1964

SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY	TOTAL	TYPE OF EMPLOYER								NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER		
ALL FIELDS	223,854	77,727	23,405	7,472	5,522	8,722	84,421	4,277	1,434	9,617	1,257
RESEARCH AND DEVELOPMENT (A)	77,699	26,392	10,242	2,006	999	4,344	32,741	343	478	—	154
BASIC RESEARCH	35,781	19,894	5,002	779	531	2,334	6,863	80	210	—	88
APPLIED RESEARCH	30,280	6,047	4,535	1,148	405	1,739	15,924	194	231	—	57
MANAGEMENT OR ADMINISTRATION (B)	46,255	5,778	7,442	2,528	1,854	2,086	25,563	569	347	—	88
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	24,568	2,793	3,846	908	631	1,257	14,722	203	171	—	37
TEACHING	41,209	39,926	203	302	242	154	170	34	98	—	80
PRODUCTION AND INSPECTION	16,582	249	1,274	601	180	245	13,693	214	98	—	28
OTHER	26,301	3,325	3,654	1,798	1,909	1,689	10,602	2,865	358	—	101
NOT EMPLOYED	9,617	—	—	—	—	—	—	—	—	9,617	—
NO REPORT	6,191	2,057	590	237	338	204	1,652	252	55	—	806
CHEMISTRY	63,053	13,616	4,004	888	648	1,679	37,859	589	311	3,168	291
RESEARCH AND DEVELOPMENT (A)	27,645	6,522	2,286	296	226	1,068	17,030	57	130	—	30
BASIC RESEARCH	12,472	5,908	1,401	195	157	779	3,928	13	69	—	22
APPLIED RESEARCH	10,607	567	781	89	63	268	8,755	30	48	—	6
MANAGEMENT OR ADMINISTRATION (B)	13,125	602	857	173	169	313	10,788	139	72	—	12
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	8,740	328	638	62	55	192	7,360	64	33	—	8
TEACHING	5,798	5,678	20	17	26	12	25	3	13	—	4
PRODUCTION AND INSPECTION	9,485	109	557	300	63	111	8,189	96	51	—	9
OTHER	2,242	360	204	69	72	142	1,106	248	37	—	4
NOT EMPLOYED	3,168	—	—	—	—	—	—	—	—	3,168	—
NO REPORT	1,590	345	80	33	92	33	721	46	8	—	232
EARTH SCIENCES	17,907	4,023	2,325	658	241	216	8,400	821	87	962	174
RESEARCH AND DEVELOPMENT (A)	2,826	918	928	142	20	118	658	18	19	—	5
BASIC RESEARCH	1,696	764	537	90	5	90	180	13	15	—	2
APPLIED RESEARCH	1,112	151	388	52	15	28	466	5	4	—	3
MANAGEMENT OR ADMINISTRATION (B)	2,614	217	511	155	91	47	1,503	73	16	—	1
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	964	106	294	77	29	26	401	23	8	—	—
TEACHING	2,545	2,483	10	7	22	6	6	—	7	—	4
PRODUCTION AND INSPECTION	939	10	86	63	3	3	721	45	7	—	1
OTHER	7,392	277	718	275	63	39	5,343	624	33	—	20
NOT EMPLOYED	962	—	—	—	—	—	—	—	—	962	—
NO REPORT	629	118	72	16	42	3	169	61	5	—	143
METEOROLOGY	5,510	527	1,857	78	2,113	152	594	18	16	140	15
RESEARCH AND DEVELOPMENT (A)	1,043	276	416	21	59	98	164	3	5	—	1
BASIC RESEARCH	519	204	188	6	8	54	55	1	2	—	1
APPLIED RESEARCH	505	68	223	15	51	43	100	2	3	—	—
MANAGEMENT OR ADMINISTRATION (B)	1,265	34	467	22	576	37	122	3	4	—	—
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	346	22	153	11	64	29	64	—	3	—	—
TEACHING	222	165	12	2	37	—	4	—	1	—	1
PRODUCTION AND INSPECTION	68	—	23	10	18	—	16	—	1	—	—
OTHER	2,596	35	894	20	1,360	14	260	9	4	—	—
NOT EMPLOYED	140	—	—	—	—	—	—	—	—	140	—
NO REPORT	176	17	45	3	63	3	28	3	1	—	13
PHYSICS	26,698	11,611	2,913	89	473	1,011	8,954	166	25	1,350	106
RESEARCH AND DEVELOPMENT (A)	14,345	5,380	2,015	47	119	723	5,984	44	16	—	17
BASIC RESEARCH	8,040	4,608	1,039	35	56	446	1,830	8	9	—	9
APPLIED RESEARCH	4,244	549	754	7	45	226	2,636	18	5	—	4
MANAGEMENT OR ADMINISTRATION (B)	4,018	556	692	20	209	206	2,288	41	3	—	3
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	3,083	339	618	11	102	164	1,817	27	2	—	3
TEACHING	5,368	5,259	28	4	39	16	17	1	1	—	3
PRODUCTION AND INSPECTION	221	5	29	5	6	2	169	3	2	—	—
OTHER	775	117	106	11	63	46	360	68	2	—	2
NOT EMPLOYED	1,350	—	—	—	—	—	—	—	—	1,350	—
NO REPORT	621	294	43	2	37	18	136	9	1	—	81
MATHEMATICS	17,411	7,206	1,113	211	277	828	6,935	115	83	562	81
RESEARCH AND DEVELOPMENT (A)	5,587	1,536	533	56	55	432	2,907	21	33	—	14
BASIC RESEARCH	1,659	1,148	99	24	7	83	279	2	11	—	6
APPLIED RESEARCH	2,149	316	317	21	30	226	1,206	12	13	—	8
MANAGEMENT OR ADMINISTRATION (B)	3,444	440	310	44	122	237	2,254	19	17	—	1
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	1,916	210	228	27	54	169	1,209	10	8	—	1
TEACHING	5,023	4,827	24	57	24	8	62	4	7	—	10
PRODUCTION AND INSPECTION	1,080	48	109	14	26	81	787	7	5	—	3
OTHER	1,340	209	103	31	43	60	811	60	19	—	4
NOT EMPLOYED	562	—	—	—	—	—	—	—	—	562	—
NO REPORT	375	146	34	9	7	10	114	4	2	—	49

TABLE A-7.-NUMBER OF SCIENTISTS, BY FIELD, WORK ACTIVITY AND TYPE OF EMPLOYER, 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY	TOTAL	TYPE OF EMPLOYER								NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER		
LINGUISTICS	1,351	930	72	25	1	100	64	4	10	126	19
RESEARCH AND DEVELOPMENT (A)	214	110	16	2	—	54	25	2	4	—	1
BASIC RESEARCH	132	87	3	—	—	29	8	1	3	—	1
APPLIED RESEARCH	77	22	13	2	—	25	13	1	1	—	—
MANAGEMENT OR ADMINISTRATION (B)	171	93	26	11	1	17	20	—	2	—	1
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	64	33	8	2	—	11	10	—	—	—	—
TEACHING	695	656	17	6	—	4	5	—	1	—	6
PRODUCTION AND INSPECTION	4	—	—	2	—	—	2	—	—	—	—
OTHER	81	36	9	3	—	21	7	2	2	—	1
NOT EMPLOYED	126	—	—	—	—	—	—	—	—	126	—
NO REPORT	60	35	4	1	—	4	5	—	1	—	10
OTHER FIELDS	20,770	5,028	1,553	458	578	524	11,074	359	124	979	93
RESEARCH AND DEVELOPMENT (A)	4,848	587	424	57	46	155	3,517	36	19	—	7
BASIC RESEARCH	517	297	73	9	12	25	96	1	2	—	2
APPLIED RESEARCH	1,591	219	195	27	19	90	1,018	13	7	—	3
MANAGEMENT OR ADMINISTRATION (B)	5,704	473	742	174	295	200	3,723	68	21	—	8
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	2,867	179	450	46	104	123	1,927	24	10	—	4
TEACHING	3,851	3,684	17	39	46	8	30	3	14	—	10
PRODUCTION AND INSPECTION	2,571	20	112	68	46	10	2,263	34	14	—	4
OTHER	2,333	170	224	102	107	137	1,337	199	53	—	4
NOT EMPLOYED	979	—	—	—	—	—	—	—	—	979	—
NO REPORT	484	94	34	18	38	14	204	19	3	—	60

(A) INCLUDES DEVELOPMENT AND DESIGN, NOT SEPARATELY IDENTIFIED.
(B) INCLUDES MANAGEMENT AND ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-8.-NUMBER OF SCIENTISTS, BY FIELD, YEARS OF PROFESSIONAL EXPERIENCE, AND TYPE OF EMPLOYER, 1964.

SCIENTIFIC AND TECHNICAL FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	TYPE OF EMPLOYER								NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER		
ALL FIELDS	223,854	77,727	23,405	7,472	5,522	8,722	84,421	4,277	1,434	9,617	1,257
1 YEAR	8,303	3,484	485	222	458	244	2,325	19	54	907	105
2 TO 4	34,864	15,154	3,147	1,183	1,276	1,163	10,302	135	195	2,069	240
5 TO 9	45,249	16,324	4,617	1,617	908	1,958	17,752	425	253	1,258	137
10 TO 14	42,706	13,030	4,698	1,569	871	1,962	18,758	927	290	504	97
15 TO 19	26,304	8,075	2,995	941	793	1,131	11,125	722	170	270	82
20 OR MORE	53,778	16,833	6,786	1,645	721	1,919	21,160	1,781	396	2,311	226
NO REPORT	12,650	4,827	677	295	495	345	2,999	268	76	2,298	370
CHEMISTRY	63,053	13,616	4,004	888	648	1,679	37,859	589	311	3,168	291
1 YEAR	3,291	1,222	129	53	140	78	1,279	4	11	334	41
2 TO 4	9,242	2,919	534	145	198	240	4,513	10	51	581	51
5 TO 9	10,812	2,355	688	141	70	323	6,836	27	48	300	24
10 TO 14	11,218	1,724	814	180	33	349	7,861	64	56	125	12
15 TO 19	6,862	1,052	493	94	27	235	4,790	63	35	65	8
20 OR MORE	17,008	2,603	1,212	222	39	398	11,106	387	90	929	22
NO REPORT	4,620	1,741	134	53	141	56	1,474	34	20	834	133
EARTH SCIENCES	17,907	4,023	2,325	658	241	216	8,400	821	87	962	174
1 YEAR	781	328	66	36	33	11	178	3	4	101	21
2 TO 4	2,157	885	258	110	56	33	624	17	14	133	27
5 TO 9	3,399	795	394	155	30	47	1,782	84	16	82	14
10 TO 14	4,093	589	558	153	24	32	2,412	233	19	61	12
15 TO 19	2,403	333	355	74	18	21	1,370	181	8	28	15
20 OR MORE	3,800	721	620	96	16	55	1,744	256	19	246	27
NO REPORT	1,274	372	74	34	64	17	290	47	7	311	58
METEOROLOGY	5,510	527	1,857	78	2,113	152	594	18	16	140	15
1 YEAR	149	29	14	2	85	2	10	------	-----	6	1
2 TO 4	708	122	161	8	329	18	49	------	1	17	3
5 TO 9	941	91	308	12	365	35	113	1	2	13	1
10 TO 14	1,019	79	330	14	431	35	113	1	2	14	-----
15 TO 19	988	55	246	16	525	22	94	2	6	21	1
20 OR MORE	1,506	119	729	22	328	34	199	13	4	52	6
NO REPORT	199	32	69	4	50	6	16	1	1	17	3
PHYSICS	26,698	11,611	2,913	89	473	1,011	8,954	166	25	1,350	106
1 YEAR	1,265	676	64	4	36	40	219	1	3	212	10
2 TO 4	6,507	3,363	617	26	181	198	1,656	6	5	431	24
5 TO 9	6,043	2,445	701	21	89	230	2,346	16	9	174	12
10 TO 14	4,634	1,676	584	10	69	233	1,992	23	1	41	5
15 TO 19	2,302	838	299	8	22	122	1,033	26	4	27	3
20 OR MORE	4,484	1,940	604	17	24	163	1,553	91	2	86	4
NO REPORT	1,383	673	44	3	52	25	155	3	1	379	48
MATHEMATICS	17,411	7,206	1,113	211	277	828	6,935	115	83	562	81
1 YEAR	246	161	12	3	9	6	37	------	2	13	3
2 TO 4	3,262	1,562	164	42	83	107	1,058	5	14	202	25
5 TO 9	5,328	1,868	314	56	56	292	2,511	19	28	172	12
10 TO 14	3,630	1,191	279	30	54	205	1,759	33	21	50	8
15 TO 19	1,670	672	119	23	28	85	706	15	5	15	2
20 OR MORE	2,729	1,495	204	53	30	114	717	39	12	47	18
NO REPORT	546	257	21	4	17	19	147	4	1	63	13
AGRICULTURAL SCIENCES	9,526	2,833	3,295	1,440	47	99	1,382	174	36	160	60
1 YEAR	189	76	40	23	4	2	25	------	3	14	2
2 TO 4	1,451	422	506	266	23	12	152	16	4	34	16
5 TO 9	2,008	535	780	339	7	15	275	22	4	26	5
10 TO 14	1,923	523	628	323	3	16	368	38	8	14	2
15 TO 19	1,309	413	388	218	1	21	221	27	5	5	10
20 OR MORE	2,337	755	877	238	1	32	295	58	12	51	18
NO REPORT	309	109	76	33	8	1	46	13	-----	16	7
BIOLOGICAL SCIENCES	27,135	15,872	2,916	1,203	790	1,775	2,720	647	202	839	171
1 YEAR	708	395	68	40	32	52	59	5	9	42	6
2 TO 4	4,007	2,492	384	162	139	186	300	35	33	251	25
5 TO 9	5,468	3,394	573	214	156	334	514	66	28	159	30
10 TO 14	5,128	3,032	568	187	124	353	652	111	31	54	16
15 TO 19	3,183	1,857	359	146	103	228	342	101	19	15	13
20 OR MORE	7,344	4,020	881	408	208	539	725	293	73	149	48
NO REPORT	1,297	682	83	46	28	83	128	36	9	169	33
PSYCHOLOGY	16,804	8,162	1,378	1,901	230	1,574	1,362	1,144	274	658	121
1 YEAR	337	170	26	42	18	28	18	1	5	24	5
2 TO 4	2,347	1,229	181	307	70	233	137	29	28	120	13
5 TO 9	3,720	1,891	261	509	35	406	293	141	56	113	15
10 TO 14	3,952	1,788	336	468	47	436	394	344	68	50	21
15 TO 19	2,162	1,035	207	214	23	185	204	222	34	27	11
20 OR MORE	3,321	1,677	299	275	24	215	235	314	66	190	26
NO REPORT	965	372	68	86	13	71	81	93	17	134	30

TABLE A-8.-NUMBER OF SCIENTISTS, BY FIELD, YEARS OF PROFESSIONAL EXPERIENCE, AND TYPE OF EMPLOYER, 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	TYPE OF EMPLOYER								NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER		
STATISTICS - - - - - - - - - - -	2,843	778	568	122	31	139	1,055	25	38	66	21
1 YEAR - - - - - - - - - - - - - - - - -	22	14	1	------	2	1	3	------	-----	1	------
2 TO 4 - - - - - - - - - - - - - - - - -	422	161	40	7	15	21	147	1	2	19	9
5 TO 9 - - - - - - - - - - - - - - - - -	668	177	96	28	7	33	297	4	8	16	2
10 TO 14 - - - - - - - - - - - - - - - -	620	146	117	23	2	37	270	3	11	8	3
15 TO 19 - - - - - - - - - - - - - - - -	411	98	99	25	2	16	152	6	5	5	3
20 OR MORE - - - - - - - - - - - - - -	609	158	203	38	2	24	148	11	11	11	3
NO REPORT - - - - - - - - - - - - - -	91	24	12	1	1	7	38	------	1	6	1
ECONOMICS - - - - - - - - - - -	12,143	5,061	1,274	284	83	465	3,967	195	207	510	97
1 YEAR - - - - - - - - - - - - - - - - -	372	180	40	8	15	16	61	2	10	37	3
2 TO 4 - - - - - - - - - - - - - - - - -	1,446	799	127	38	19	46	312	6	27	52	20
5 TO 9 - - - - - - - - - - - - - - - - -	1,993	969	188	41	9	83	624	18	22	27	12
10 TO 14 - - - - - - - - - - - - - - - -	2,078	828	206	59	9	83	805	22	38	19	9
15 TO 19 - - - - - - - - - - - - - - - -	1,729	746	165	35	10	77	612	27	33	20	4
20 OR MORE - - - - - - - - - - - - - -	3,720	1,285	487	92	7	135	1,292	101	67	222	32
NO REPORT - - - - - - - - - - - - - -	805	254	61	11	14	25	261	19	10	133	17
SOCIOLOGY - - - - - - - - - - -	2,703	2,080	137	115	10	160	55	20	21	97	8
1 YEAR - - - - - - - - - - - - - - - - -	35	31	1	------	------	1	------	------	-----	2	-----
2 TO 4 - - - - - - - - - - - - - - - - -	255	216	3	7	3	8	5	2	-----	11	-----
5 TO 9 - - - - - - - - - - - - - - - - -	608	466	35	30	2	34	17	3	5	15	1
10 TO 14 - - - - - - - - - - - - - - - -	579	450	32	31	3	38	11	------	5	8	1
15 TO 19 - - - - - - - - - - - - - - - -	394	306	22	18	------	27	7	4	7	2	1
20 OR MORE - - - - - - - - - - - - - -	739	544	41	28	2	47	12	10	4	49	2
NO REPORT - - - - - - - - - - - - - -	93	67	3	1	------	5	3	1	-----	10	3
LINGUISTICS - - - - - - - - - - -	1,351	930	72	25	1	100	64	4	10	126	19
1 YEAR - - - - - - - - - - - - - - - - -	45	27	3	2	------	1	2	------	-----	9	1
2 TO 4 - - - - - - - - - - - - - - - - -	210	129	6	5	------	19	10	------	2	34	5
5 TO 9 - - - - - - - - - - - - - - - - -	316	214	15	4	1	36	18	1	3	24	-----
10 TO 14 - - - - - - - - - - - - - - - -	257	179	19	5	------	21	13	1	3	15	1
15 TO 19 - - - - - - - - - - - - - - - -	140	110	10	3	------	6	9	------	-----	1	1
20 OR MORE - - - - - - - - - - - - - -	285	231	18	5	------	8	9	1	1	7	5
NO REPORT - - - - - - - - - - - - - -	98	40	1	1	------	9	3	1	1	36	6
OTHER FIELDS - - - - - - - - -	20,770	5,028	1,553	458	578	524	11,074	359	124	979	93
1 YEAR - - - - - - - - - - - - - - - - -	863	175	21	9	84	6	434	3	7	112	12
2 TO 4 - - - - - - - - - - - - - - - - -	2,850	855	166	60	160	42	1,339	8	14	184	22
5 TO 9 - - - - - - - - - - - - - - - - -	3,945	1,124	264	67	81	90	2,126	23	24	137	9
10 TO 14 - - - - - - - - - - - - - - - -	3,575	825	227	86	72	124	2,109	54	27	45	7
15 TO 19 - - - - - - - - - - - - - - - -	2,671	560	233	67	34	86	1,585	48	9	39	10
20 OR MORE - - - - - - - - - - - - - -	5,896	1,285	611	151	40	155	3,125	207	35	272	15
NO REPORT - - - - - - - - - - - - - -	970	204	31	18	107	21	357	16	8	190	18

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-9.—NUMBER OF UNIVERSITY AND COLLEGE TEACHERS, BY FIELD, HIGHEST DEGREE, AND ACADEMIC RANK, 1964

SCIENTIFIC AND TECHNICAL FIELD AND HIGHEST DEGREE	TOTAL	ACADEMIC RANK									NO REPORT OF ACADEMIC RANK
		DEAN	PROFESSOR	ASSOCIATE PROFESSOR	ASSISTANT PROFESSOR	INSTRUCTOR	LECTURER	RESEARCH ASSOCIATE	RESEARCH ASSISTANT	OTHER	
ALL FIELDS	49,595	145	13,086	10,381	11,343	4,183	709	235	3,367	1,337	4,809
PH.D.	32,776	118	11,492	8,433	8,078	882	401	145	123	224	2,880
PROFESSIONAL MEDICAL	2,039	1	664	484	410	123	4	49	37	10	257
MASTER'S	11,035	26	752	1,336	2,599	2,657	256	28	1,664	474	1,243
BACHELOR'S	3,572	-----	124	98	222	508	45	11	1,534	624	406
LESS THAN BACHELOR'S	16	-----	3	1	2	2	-----	-----	3	1	4
NO REPORT	157	-----	51	29	32	11	3	2	6	4	19
CHEMISTRY	8,435	17	1,955	1,532	1,793	559	72	46	769	961	731
PH.D.	5,504	14	1,818	1,349	1,471	179	45	33	33	139	423
PROFESSIONAL MEDICAL	127	-----	27	22	49	8	1	9	2	1	8
MASTER'S	1,313	3	82	139	216	249	13	2	180	280	149
BACHELOR'S	1,464	-----	20	19	52	121	13	2	551	538	148
LESS THAN BACHELOR'S	4	-----	-----	-----	1	1	-----	-----	1	-----	1
NO REPORT	23	-----	8	3	4	1	-----	-----	2	3	2
EARTH SCIENCES	2,784	3	645	539	615	244	40	3	456	14	225
PH.D.	1,660	2	608	467	403	36	18	2	13	3	108
PROFESSIONAL MEDICAL	1	-----	-----	-----	1	-----	-----	-----	-----	-----	-----
MASTER'S	808	1	27	68	190	187	20	1	231	6	77
BACHELOR'S	308	-----	10	4	18	20	2	-----	210	5	39
LESS THAN BACHELOR'S	2	-----	-----	-----	-----	-----	-----	-----	1	-----	1
NO REPORT	5	-----	-----	-----	3	1	-----	-----	1	-----	-----
METEOROLOGY	237	-----	58	56	40	20	9	2	16	4	32
PH.D.	156	-----	51	49	27	1	5	2	1	-----	20
PROFESSIONAL MEDICAL	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MASTER'S	66	-----	5	6	13	17	4	-----	8	2	11
BACHELOR'S	14	-----	1	1	-----	2	-----	-----	7	2	1
LESS THAN BACHELOR'S	1	-----	1	-----	-----	-----	-----	-----	-----	-----	-----
NO REPORT	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
PHYSICS	6,406	9	1,538	1,196	1,392	741	127	56	922	35	390
PH.D.	3,822	7	1,420	973	956	117	77	45	12	4	211
PROFESSIONAL MEDICAL	4	-----	2	1	1	-----	-----	-----	-----	-----	-----
MASTER'S	1,795	2	99	207	395	470	37	6	443	12	124
BACHELOR'S	765	-----	14	13	33	153	12	3	466	18	53
LESS THAN BACHELOR'S	3	-----	-----	-----	1	-----	-----	-----	-----	1	1
NO REPORT	17	-----	3	2	6	1	1	2	1	-----	1
MATHEMATICS	5,241	10	1,107	902	1,374	840	92	9	356	73	478
PH.D.	2,849	8	984	631	767	151	44	5	19	13	227
PROFESSIONAL MEDICAL	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MASTER'S	2,198	2	102	258	585	637	43	3	287	53	228
BACHELOR'S	174	-----	14	11	19	50	4	1	49	7	19
LESS THAN BACHELOR'S	1	-----	1	-----	-----	-----	-----	-----	-----	-----	-----
NO REPORT	19	-----	6	2	3	2	1	-----	1	-----	4
AGRICULTURAL SCIENCES	1,498	4	482	358	288	79	6	3	41	17	220
PH.D.	948	1	397	259	176	4	5	1	1	2	102
PROFESSIONAL MEDICAL	2	-----	-----	1	-----	-----	-----	-----	1	-----	-----
MASTER'S	430	3	69	80	103	57	-----	1	24	10	83
BACHELOR'S	115	-----	15	17	9	18	1	1	15	5	34
LESS THAN BACHELOR'S	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	1
NO REPORT	2	-----	1	1	-----	-----	-----	-----	-----	-----	-----
BIOLOGICAL SCIENCES	10,148	18	2,916	2,431	2,267	616	80	93	471	74	1,182
PH.D.	6,745	15	2,201	1,821	1,645	209	57	45	25	20	707
PROFESSIONAL MEDICAL	1,888	1	629	457	355	115	2	40	33	9	247
MASTER'S	1,174	2	74	136	243	254	20	7	237	29	172
BACHELOR'S	320	-----	6	11	19	37	1	1	176	16	53
LESS THAN BACHELOR'S	3	-----	1	1	-----	1	-----	-----	-----	-----	-----
NO REPORT	18	-----	5	5	5	-----	-----	-----	-----	-----	3
PSYCHOLOGY	4,874	21	1,309	1,241	1,334	264	107	5	67	24	502
PH.D.	4,216	19	1,270	1,173	1,155	97	75	5	4	13	405
PROFESSIONAL MEDICAL	9	-----	2	1	3	-----	-----	-----	1	-----	2
MASTER'S	603	2	30	65	170	153	29	-----	58	9	87
BACHELOR'S	41	-----	5	2	6	13	2	-----	4	2	7
LESS THAN BACHELOR'S	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
NO REPORT	5	-----	2	-----	-----	1	1	-----	-----	-----	1
STATISTICS	600	-----	174	143	143	42	14	-----	24	5	55
PH.D.	423	-----	158	118	102	3	6	-----	2	1	33
PROFESSIONAL MEDICAL	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MASTER'S	158	-----	13	20	40	36	7	-----	20	3	19
BACHELOR'S	16	-----	3	3	1	3	1	-----	2	1	2
LESS THAN BACHELOR'S	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
NO REPORT	3	-----	-----	2	-----	-----	-----	-----	-----	-----	1

TABLE A-9.—NUMBER OF UNIVERSITY AND COLLEGE TEACHERS, BY FIELD, HIGHEST DEGREE, AND ACADEMIC RANK, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND HIGHEST DEGREE	TOTAL	ACADEMIC RANK									NO REPORT OF ACADEMIC RANK
		DEAN	PROFESSOR	ASSOCIATE PROFESSOR	ASSISTANT PROFESSOR	INSTRUCTOR	LECTURER	RESEARCH ASSOCIATE	RESEARCH ASSISTANT	OTHER	
ECONOMICS - - - - - - - -	4,254	42	1,391	921	993	285	68	6	87	32	429
PH.D. - - - - - - - - - - - - -	3,024	34	1,247	762	618	25	16	2	4	7	309
PROFESSIONAL MEDICAL - - - - -	1	------	------	1	------	------	------	------	------	------	------
MASTER'S - - - - - - - - - - -	1,095	8	117	143	330	238	48	3	79	23	106
BACHELOR'S - - - - - - - - - -	108	------	17	9	40	21	4	1	4	1	11
LESS THAN BACHELOR'S - - - - -	-------	------	------	------	------	------	------	------	------	------	------
NO REPORT - - - - - - - - - -	26	------	10	6	5	1	------	------	------	1	3
SOCIOLOGY - - - - - - - -	1,797	4	636	432	396	57	45	3	2	1	221
PH.D. - - - - - - - - - - - - -	1,563	4	599	384	334	24	34	2	------	------	182
PROFESSIONAL MEDICAL - - - - -	4	------	2	------	1	------	1	------	------	------	------
MASTER'S - - - - - - - - - - -	214	------	28	46	59	32	10	1	2	1	35
BACHELOR'S - - - - - - - - - -	13	------	6	1	2	1	------	------	------	------	3
LESS THAN BACHELOR'S - - - - -	-------	------	------	------	------	------	------	------	------	------	------
NO REPORT - - - - - - - - - -	3	------	1	1	------	------	------	------	------	------	1
LINGUISTICS - - - - - - -	784	------	211	162	189	107	5	3	30	12	65
PH.D. - - - - - - - - - - - - -	560	------	194	144	149	17	3	1	2	4	46
PROFESSIONAL MEDICAL - - - - -	-------	------	------	------	------	------	------	------	------	------	------
MASTER'S - - - - - - - - - - -	169	------	4	13	32	75	2	1	22	4	16
BACHELOR'S - - - - - - - - - -	29	------	------	1	3	12	------	1	5	4	3
LESS THAN BACHELOR'S - - - - -	-------	------	------	------	------	------	------	------	------	------	------
NO REPORT - - - - - - - - - -	26	------	13	4	5	3	------	------	1	------	------
OTHER FIELDS - - - - - -	2,537	17	664	468	519	329	44	6	126	85	279
PH.D. - - - - - - - - - - - - -	1,306	14	545	303	275	19	16	2	7	18	107
PROFESSIONAL MEDICAL - - - - -	3	------	2	1	------	------	------	------	------	------	------
MASTER'S - - - - - - - - - - -	1,012	3	102	155	223	252	23	3	73	42	136
BACHELOR'S - - - - - - - - - -	205	------	13	6	20	57	5	1	45	25	33
LESS THAN BACHELOR'S - - - - -	1	------	------	------	------	------	------	------	1	------	------
NO REPORT - - - - - - - - - -	10	------	2	3	1	1	------	------	------	------	3

NOTE - INCLUDES SCIENTISTS REPORTING COLLEGE AND UNIVERSITY TEACHING AS A FIRST OR SECOND WORK ACTIVITY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-10.-NUMBER OF SCIENTISTS, BY FIELD, AGE AND WORK ACTIVITY, 1964

SCIENTIFIC AND TECHNICAL FIELD AND AGE	TOTAL	WORK ACTIVITY								NOT EMPLOYED	NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER		
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D					
ALL FIELDS	223,854	77,699	35,781	30,280	46,255	24,568	41,209	16,582	26,301	9,617	6,191
20-24	8,247	3,251	1,988	724	262	80	1,389	749	753	1,370	473
25-29	34,102	16,599	8,749	4,925	2,222	811	5,207	3,183	3,033	2,878	980
30-34	39,896	17,950	8,529	6,646	4,807	2,432	7,364	3,040	4,639	1,317	779
35-39	40,148	15,001	6,639	6,225	8,381	4,686	7,114	2,864	5,280	727	781
40-44	35,831	11,121	4,519	5,071	10,088	5,733	6,374	2,523	4,460	464	801
45-49	24,726	6,158	2,397	2,889	8,242	4,501	4,585	1,800	3,075	266	600
50-54	16,921	3,568	1,291	1,805	5,851	3,024	3,436	1,221	2,096	183	566
55-59	11,308	2,116	799	1,085	3,665	1,882	2,711	720	1,413	206	477
60-64	6,966	1,178	491	582	1,974	1,020	1,883	370	846	351	364
65-69	3,428	493	242	223	544	282	869	71	441	784	226
70 AND OVER	1,992	181	101	66	160	93	202	33	232	1,054	130
NO REPORT	289	83	36	39	59	24	75	8	33	17	14
CHEMISTRY	63,053	27,645	12,472	10,607	13,125	8,740	5,798	9,485	2,242	3,168	1,590
20-24	3,841	1,725	1,116	354	68	18	487	481	250	623	207
25-29	10,355	5,981	3,289	1,648	358	173	802	1,672	326	954	262
30-34	10,157	5,918	2,769	2,242	981	665	1,014	1,522	236	307	179
35-39	10,357	5,102	2,107	2,132	2,188	1,526	868	1,61[illegible]	260	156	168
40-44	9,687	3,910	1,445	1,779	2,984	2,068	790	1,453	270	107	173
45-49	7,294	2,386	871	1,095	2,727	1,849	562	1,136	270	58	155
50-54	4,918	1,320	412	683	1,928	1,246	436	813	213	48	160
55-59	2,994	723	233	389	1,115	702	347	477	157	62	113
60-64	1,878	393	138	205	578	365	307	240	135	126	99
65-69	943	123	66	49	139	83	154	51	87	338	51
70 AND OVER	594	44	18	22	52	40	28	22	37	389	22
NO REPORT	35	20	8	9	7	5	3	3	1	——	1
EARTH SCIENCES	17,907	2,826	1,696	1,112	2,614	964	2,545	939	7,392	962	629
20-24	658	112	82	30	14	2	152	21	152	146	61
25-29	2,141	563	386	173	85	28	357	129	640	245	122
30-34	3,317	658	399	255	184	70	532	227	1,509	129	78
35-39	3,752	553	303	243	484	174	399	229	1,927	78	82
40-44	3,098	396	220	175	622	228	399	164	1,379	51	87
45-49	1,799	217	110	107	464	173	250	68	730	24	46
50-54	1,206	136	83	51	332	133	166	57	453	22	40
55-59	876	97	55	42	240	84	140	29	302	27	41
60-64	532	45	25	20	136	51	93	9	165	53	31
65-69	332	33	22	11	38	14	47	5	89	93	27
70 AND OVER	177	15	10	5	11	7	6	1	40	91	13
NO REPORT	19	1	1	——	4	——	4	——	6	3	1
METEOROLOGY	5,510	1,043	519	505	1,265	346	222	68	2,596	140	176
20-24	118	32	17	12	——	——	1	3	65	7	10
25-29	677	213	122	83	33	9	22	11	352	26	20
30-34	968	243	138	101	103	34	34	11	541	13	23
35-39	892	191	91	97	154	52	34	10	483	3	17
40-44	1,166	174	77	96	398	113	57	16	453	32	36
45-49	978	108	37	71	346	91	44	5	409	32	34
50-54	384	46	21	25	110	27	17	10	179	5	17
55-59	228	17	9	8	93	18	10	2	90	6	10
60-64	62	13	5	8	22	2	2	——	18	3	4
65-69	25	5	1	4	5	——	1	——	4	6	4
70 AND OVER	11	1	1	——	1	——	——	——	1	7	1
NO REPORT	1	——	——	——	——	——	——	——	1	——	——
PHYSICS	26,698	14,345	8,040	4,244	4,018	3,083	5,368	221	775	1,350	621
20-24	1,568	726	493	139	28	11	367	14	46	291	96
25-29	6,686	4,414	2,704	1,105	246	138	963	55	185	642	181
30-34	5,730	3,714	2,116	1,072	524	389	1,027	55	135	179	96
35-39	4,409	2,409	1,269	802	860	691	847	38	106	81	68
40-44	3,528	1,592	774	580	962	785	738	28	106	44	58
45-49	1,793	697	330	245	564	470	402	12	62	18	38
50-54	1,191	366	153	144	362	249	363	8	53	16	23
55-59	865	214	90	86	262	200	300	6	39	12	32
60-64	604	141	72	49	164	113	232	4	26	17	20
65-69	224	47	23	18	35	27	101	1	6	29	5
70 AND OVER	85	17	11	2	9	8	24	——	10	21	4
NO REPORT	15	8	5	2	2	2	4	——	1	——	——
MATHEMATICS	17,411	5,587	1,659	2,149	3,444	1,916	5,023	1,080	1,340	562	375
20-24	343	130	59	45	14	8	80	19	50	29	21
25-29	3,703	1,556	546	498	261	129	929	329	338	209	81
30-34	4,304	1,657	458	571	712	384	1,059	325	338	145	68
35-39	3,439	1,063	272	446	965	578	820	200	254	74	63
40-44	2,252	612	157	294	663	390	623	115	155	34	50
45-49	1,301	268	69	133	374	209	475	45	100	18	21
50-54	882	165	41	103	230	122	389	26	48	4	20
55-59	601	77	28	35	132	58	322	13	31	6	20
60-64	359	42	20	20	75	30	201	6	17	3	15
65-69	165	7	3	3	13	4	99	1	3	29	13
70 AND OVER	56	6	6	——	4	3	26	1	5	11	3
NO REPORT	6	4	——	1	1	1	——	——	1	——	——

TABLE A-10.—NUMBER OF SCIENTISTS, BY FIELD, AGE, AND WORK ACTIVITY, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND AGE	TOTAL	WORK ACTIVITY								NOT EMPLOYED	NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER		
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D					
AGRICULTURAL SCIENCES - - - - -	9,526	2,729	847	1,812	4,287	1,136	893	257	835	160	365
20-24 - - - - - - - - - - - - - - - -	133	34	20	13	49	9	6	2	24	8	10
25-29 - - - - - - - - - - - - - - - -	1,279	398	150	235	542	58	63	47	127	38	64
30-34 - - - - - - - - - - - - - - - -	1,700	575	211	344	690	121	136	57	153	34	55
35-39 - - - - - - - - - - - - - - - -	1,574	485	145	326	692	148	145	45	138	18	51
40-44 - - - - - - - - - - - - - - - -	1,621	504	148	350	737	225	162	43	126	4	45
45-49 - - - - - - - - - - - - - - - -	1,241	316	73	235	597	217	173	20	95	3	37
50-54 - - - - - - - - - - - - - - - -	874	178	43	130	472	152	89	24	73	------	38
55-59 - - - - - - - - - - - - - - - -	590	123	34	88	310	121	57	10	49	7	34
60-64 - - - - - - - - - - - - - - - -	280	66	12	52	132	55	30	6	26	6	14
65-69 - - - - - - - - - - - - - - - -	133	33	7	26	38	22	19	------	13	19	11
70 AND OVER - - - - - - - - - - - -	55	5	1	4	7	3	7	2	8	23	3
NO REPORT - - - - - - - - - - - - -	46	12	3	9	21	5	6	1	3	------	3
BIOLOGICAL SCIENCES - - - - - -	27,135	10,980	7,368	3,531	4,110	2,492	7,785	348	2,087	839	986
20-24 - - - - - - - - - - - - - - - -	351	149	120	27	7	5	112	8	19	47	9
25-29 - - - - - - - - - - - - - - - -	2,800	1,260	982	265	129	56	761	58	232	277	83
30-34 - - - - - - - - - - - - - - - -	4,513	2,332	1,668	654	295	152	1,185	78	319	187	117
35-39 - - - - - - - - - - - - - - - -	5,347	2,608	1,751	838	588	367	1,513	60	345	95	138
40-44 - - - - - - - - - - - - - - - -	4,514	1,967	1,215	731	731	493	1,285	52	301	37	141
45-49 - - - - - - - - - - - - - - - -	3,332	1,073	664	404	780	493	1,015	38	288	20	118
50-54 - - - - - - - - - - - - - - - -	2,436	666	407	251	669	398	729	27	211	17	117
55-59 - - - - - - - - - - - - - - - -	1,827	460	267	191	475	266	595	20	169	11	97
60-64 - - - - - - - - - - - - - - - -	1,160	256	158	98	292	181	381	7	120	24	80
65-69 - - - - - - - - - - - - - - - -	531	132	83	49	107	63	155	------	55	25	57
70 AND OVER - - - - - - - - - - - -	247	52	37	15	25	13	24	------	24	97	25
NO REPORT - - - - - - - - - - - - -	77	25	16	8	12	5	30	------	4	2	4
PSYCHOLOGY - - - - - - - - - - -	16,804	4,108	1,397	2,595	2,849	1,079	3,670	11	5,148	658	360
20-24 - - - - - - - - - - - - - - - -	35	14	10	4	3	2	5	------	7	5	1
25-29 - - - - - - - - - - - - - - - -	1,220	506	233	264	66	37	245	1	302	82	18
30-34 - - - - - - - - - - - - - - - -	2,838	1,026	387	601	270	120	629	1	774	102	36
35-39 - - - - - - - - - - - - - - - -	3,739	1,015	357	631	632	261	788	3	1,150	94	57
40-44 - - - - - - - - - - - - - - - -	3,299	726	212	491	684	266	689	1	1,076	58	65
45-49 - - - - - - - - - - - - - - - -	2,047	341	94	235	469	172	473	3	677	43	41
50-54 - - - - - - - - - - - - - - - -	1,493	216	38	174	373	112	327	------	516	15	46
55-59 - - - - - - - - - - - - - - - -	984	149	28	120	205	63	248	2	326	23	31
60-64 - - - - - - - - - - - - - - - -	589	70	22	47	107	35	168	------	177	37	30
65-69 - - - - - - - - - - - - - - - -	290	32	10	22	29	7	63	------	88	61	17
70 AND OVER - - - - - - - - - - - -	237	8	4	3	9	3	27	------	42	136	15
NO REPORT - - - - - - - - - - - - -	33	5	2	3	2	1	8	------	13	2	3
STATISTICS - - - - - - - - - - -	2,843	854	170	552	694	346	484	374	289	66	82
20-24 - - - - - - - - - - - - - - - -	22	5	2	2	1	------	7	5	1	3	------
25-29 - - - - - - - - - - - - - - - -	377	151	35	96	34	17	56	54	45	23	14
30-34 - - - - - - - - - - - - - - - -	572	201	40	129	90	52	118	71	61	14	17
35-39 - - - - - - - - - - - - - - - -	543	185	28	125	136	72	83	67	55	4	13
40-44 - - - - - - - - - - - - - - - -	462	126	27	79	125	59	71	67	60	3	10
45-49 - - - - - - - - - - - - - - - -	379	85	15	54	128	59	64	57	35	4	6
50-54 - - - - - - - - - - - - - - - -	228	52	11	35	85	38	38	28	15	4	6
55-59 - - - - - - - - - - - - - - - -	151	32	5	22	57	31	24	18	10	2	8
60-64 - - - - - - - - - - - - - - - -	80	12	3	9	33	15	16	7	5	3	4
65-69 - - - - - - - - - - - - - - - -	16	1	1	------	3	1	5	------	1	4	2
70 AND OVER - - - - - - - - - - - -	12	4	3	1	2	2	2	------	1	1	2
NO REPORT - - - - - - - - - - - - -	1	------	------	------	------	------	------	------	------	1	------
ECONOMICS - - - - - - - - - - -	12,143	1,927	584	1,296	3,534	1,288	3,469	1,215	1,091	510	397
20-24 - - - - - - - - - - - - - - - -	148	30	11	19	11	------	23	24	18	35	7
25-29 - - - - - - - - - - - - - - - -	1,130	275	92	175	113	28	280	212	121	87	42
30-34 - - - - - - - - - - - - - - - -	1,905	452	143	297	339	129	607	227	197	44	39
35-39 - - - - - - - - - - - - - - - -	1,934	352	108	234	554	188	564	219	161	30	54
40-44 - - - - - - - - - - - - - - - -	2,151	306	87	212	735	292	642	223	157	25	63
45-49 - - - - - - - - - - - - - - - -	1,680	194	56	133	681	218	466	139	145	15	40
50-54 - - - - - - - - - - - - - - - -	1,210	138	33	104	497	192	323	69	121	17	45
55-59 - - - - - - - - - - - - - - - -	835	75	26	47	337	142	239	58	70	13	43
60-64 - - - - - - - - - - - - - - - -	538	49	12	36	173	58	179	31	51	28	27
65-69 - - - - - - - - - - - - - - - -	353	43	13	29	72	34	115	9	33	65	16
70 AND OVER - - - - - - - - - - - -	238	8	2	6	19	6	24	3	17	148	19
NO REPORT - - - - - - - - - - - - -	21	5	1	4	3	1	7	1	------	3	2
SOCIOLOGY - - - - - - - - - - -	2,703	593	380	209	440	247	1,406	9	92	97	66
20-24 - - - - - - - - - - - - - - - -	6	1	1	------	------	------	2	------	1	2	------
25-29 - - - - - - - - - - - - - - - -	92	31	22	9	5	4	43	2	6	4	1
30-34 - - - - - - - - - - - - - - - -	355	112	84	27	44	29	175	------	11	9	4
35-39 - - - - - - - - - - - - - - - -	513	154	96	58	63	38	256	1	16	11	12
40-44 - - - - - - - - - - - - - - - -	517	113	70	41	99	62	270	2	13	10	10
45-49 - - - - - - - - - - - - - - - -	414	73	45	27	84	46	231	2	14	2	8
50-54 - - - - - - - - - - - - - - - -	311	51	29	22	71	32	168	2	9	6	4
55-59 - - - - - - - - - - - - - - - -	191	23	10	13	38	20	114	------	8	1	7
60-64 - - - - - - - - - - - - - - - -	144	18	12	6	28	11	80	------	8	4	6
65-69 - - - - - - - - - - - - - - - -	85	9	6	3	6	4	50	------	3	11	6
70 AND OVER - - - - - - - - - - - -	73	8	5	3	2	1	15	------	3	37	8
NO REPORT - - - - - - - - - - - - -	2	------	------	------	------	------	2	------	------	------	------

TABLE A-10.—NUMBER OF SCIENTISTS, BY FIELD, AGE, AND WORK ACTIVITY, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND AGE	TOTAL	WORK ACTIVITY								NOT EMPLOYED	NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER		
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D					
LINGUISTICS	1,351	214	132	77	171	64	695	4	81	126	60
20-24	26	6	5	1	------	------	4	------	1	13	2
25-29	162	34	20	14	9	5	65	1	7	34	12
30-34	239	51	25	24	19	6	124	------	13	26	6
35-39	274	59	40	17	33	16	135	------	15	19	13
40-44	215	27	19	7	45	17	107	2	12	16	6
45-49	132	11	6	5	22	5	81	------	9	2	7
50-54	120	7	3	4	19	8	79	------	7	2	6
55-59	92	9	7	2	15	4	52	1	10	3	2
60-64	52	5	3	2	7	2	33	------	4	------	3
65-69	20	4	3	1	1	------	10	------	1	3	1
70 AND OVER	13	1	1	------	------	------	2	------	2	6	2
NO REPORT	6	------	------	------	1	1	3	------	------	2	------
OTHER FIELDS	20,770	4,848	517	1,591	5,704	2,867	3,851	2,571	2,333	979	484
20-24	998	287	52	78	67	25	143	172	119	161	49
25-29	3,480	1,217	168	360	341	129	621	612	352	257	80
30-34	3,298	1,011	91	329	556	281	724	466	352	128	61
35-39	3,375	825	72	276	1,032	575	662	377	370	64	45
40-44	3,321	668	68	236	1,303	735	541	357	352	43	57
45-49	2,336	389	27	145	1,006	499	349	275	241	27	49
50-54	1,668	227	17	79	703	315	312	157	198	27	44
55-59	1,074	117	7	42	386	173	263	84	152	33	39
60-64	688	68	9	30	227	102	161	60	94	47	31
65-69	311	24	4	8	58	23	50	4	58	101	16
70 AND OVER	194	12	2	5	19	7	17	4	42	87	13
NO REPORT	27	3	------	3	6	3	8	3	3	4	------

(A) INCLUDES DEVELOPMENT AND DESIGN, NOT SEPARATELY IDENTIFIED.
(B) INCLUDES MANAGEMENT AND ADMINISTRATION, OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-11.-NUMBER OF SCIENTISTS, BY FIELD, YEARS OF PROFESSIONAL EXPERIENCE, AND WORK ACTIVITY, 1964

SCIENTIFIC AND TECHNICAL FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	WORK ACTIVITY								NOT EMPLOYED	NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER		
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D					
ALL FIELDS	223,854	77,699	35,781	30,280	46,255	24,568	41,209	16,582	26,301	9,617	6,191
1 YEAR	8,303	3,983	2,371	1,115	265	108	1,364	736	797	907	251
2 TO 4	34,864	16,815	9,169	5,225	2,148	837	7,025	2,558	3,434	2,069	815
5 TO 9	45,249	19,541	8,487	7,714	5,747	2,901	9,072	3,615	5,221	1,258	795
10 TO 14	42,706	15,059	6,049	6,612	9,936	5,537	7,246	3,271	5,879	504	811
15 TO 19	26,304	7,208	2,747	3,365	7,921	4,269	4,796	1,972	3,544	270	593
20 OR MORE	53,778	11,019	4,215	5,223	18,583	10,177	10,180	3,756	6,092	2,311	1,837
NO REPORT	12,650	4,074	2,743	1,026	1,655	739	1,526	674	1,334	2,298	1,089
CHEMISTRY	63,053	27,645	12,472	10,607	13,125	8,740	5,798	9,485	2,242	3,168	1,590
1 YEAR	3,291	1,869	1,111	514	68	28	372	421	138	334	89
2 TO 4	9,242	5,547	3,078	1,628	323	165	957	1,353	294	581	187
5 TO 9	10,812	6,097	2,669	2,391	1,111	776	1,122	1,781	250	300	151
10 TO 14	11,218	5,257	1,911	2,337	2,616	1,858	833	1,880	323	125	184
15 TO 19	6,862	2,583	900	1,171	2,146	1,441	576	1,162	210	65	120
20 OR MORE	17,008	4,345	1,414	2,154	6,359	4,185	1,549	2,502	813	929	511
NO REPORT	4,620	1,947	1,389	412	502	287	339	386	214	834	348
EARTH SCIENCES	17,907	2,826	1,696	1,112	2,614	964	2,545	939	7,392	962	629
1 YEAR	781	192	115	75	22	7	171	44	207	101	44
2 TO 4	2,157	593	418	169	77	32	491	124	661	133	78
5 TO 9	3,399	624	346	273	212	78	548	255	1,615	82	63
10 TO 14	4,093	564	298	264	587	225	424	242	2,121	61	94
15 TO 19	2,403	270	144	124	554	181	257	107	1,131	28	56
20 OR MORE	3,800	412	239	171	1,055	411	506	118	1,328	246	135
NO REPORT	1,274	171	136	35	107	30	148	49	329	311	159
METEOROLOGY	5,510	1,043	519	505	1,265	346	222	68	2,596	140	176
1 YEAR	149	42	27	14	4	1	1	3	88	6	5
2 TO 4	708	195	110	76	48	8	28	12	389	17	19
5 TO 9	941	252	130	117	128	38	41	12	475	13	20
10 TO 14	1,019	223	110	111	184	61	43	12	521	14	22
15 TO 19	988	107	39	66	304	59	35	11	480	21	30
20 OR MORE	1,506	182	77	105	560	169	66	13	574	52	59
NO REPORT	199	42	26	16	37	10	8	5	69	17	21
PHYSICS	26,698	14,345	8,040	4,244	4,018	3,083	5,368	221	775	1,350	621
1 YEAR	1,265	760	548	138	16	7	199	11	31	212	36
2 TO 4	6,507	4,214	2,597	1,048	223	122	1,293	49	161	431	136
5 TO 9	6,043	3,843	2,016	1,229	586	448	1,163	53	140	174	84
10 TO 14	4,634	2,495	1,252	841	972	782	832	50	117	41	77
15 TO 19	2,382	1,034	478	395	683	552	497	27	78	27	36
20 OR MORE	4,484	1,351	626	505	1,476	1,141	1,244	26	196	86	105
NO REPORT	1,383	648	523	88	62	31	90	5	52	379	147
MATHEMATICS	17,411	5,587	1,659	2,147	3,444	1,916	5,023	1,080	1,340	562	375
1 YEAR	246	127	85	31	3	1	78	10	10	13	5
2 TO 4	3,262	1,294	513	396	182	94	966	226	315	202	77
5 TO 9	5,328	2,067	477	754	812	434	1,304	480	412	172	81
10 TO 14	3,630	1,130	257	519	1,059	623	861	205	266	50	59
15 TO 19	1,670	399	113	199	531	294	495	62	133	15	35
20 OR MORE	2,729	428	140	218	779	428	1,161	66	163	47	65
NO REPORT	546	142	74	32	78	42	138	31	41	63	53
AGRICULTURAL SCIENCES	9,526	2,729	847	1,812	4,287	1,136	893	257	835	160	365
1 YEAR	189	74	27	47	35	6	21	13	27	14	5
2 TO 4	1,451	496	202	273	552	69	106	54	143	34	66
5 TO 9	2,008	662	225	438	846	158	168	52	166	26	68
10 TO 14	1,923	55	159	394	900	208	173	59	160	14	53
15 TO 19	1,309	333	82	251	647	225	145	28	106	5	40
20 OR MORE	2,337	477	112	354	1,197	443	259	45	196	51	112
NO REPORT	309	98	40	55	110	27	21	6	37	16	21
BIOLOGICAL SCIENCES	27,135	10,980	7,368	3,531	4,110	2,492	7,785	348	2,087	839	986
1 YEAR	708	344	268	75	26	15	180	14	81	42	21
2 TO 4	4,007	1,994	1,504	474	177	102	1,129	79	293	251	84
5 TO 9	5,468	2,641	1,822	803	449	245	1,650	74	349	159	146
10 TO 14	5,128	2,345	1,521	801	735	462	1,472	66	331	54	125
15 TO 19	3,183	1,195	715	468	626	397	956	30	239	15	122
20 OR MORE	7,344	1,986	1,194	780	1,930	1,168	2,147	72	679	149	381
NO REPORT	1,297	475	344	130	167	103	251	13	115	169	107
PSYCHOLOGY	16,804	4,108	1,397	2,595	2,849	1,079	3,670	11	5,148	658	360
1 YEAR	337	135	75	59	12	9	85	------	76	24	5
2 TO 4	2,347	875	358	499	132	74	515	1	668	120	36
5 TO 9	3,720	1,192	376	773	424	172	830	2	1,106	113	53
10 TO 14	3,952	892	270	594	790	307	794	3	1,360	50	63
15 TO 19	2,162	394	108	271	526	191	486	1	689	27	39
20 OR MORE	3,321	422	130	285	822	272	808	4	972	190	103
NO REPORT	965	198	80	114	143	54	152	------	277	134	61

TABLE A-11.-NUMBER OF SCIENTISTS, BY FIELD, YEARS OF PROFESSIONAL EXPERIENCE, AND WORK ACTIVITY, 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	WORK ACTIVITY								NOT EMPLOYED	NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER		
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (A)	OF R+D					
STATISTICS	2,843	854	170	552	694	346	484	374	289	66	82
1 YEAR	22	8	5	2	3	1	8	1	1	1	------
2 TO 4	422	164	41	101	32	18	91	52	47	19	17
5 TO 9	668	254	45	166	99	57	120	93	74	16	12
10 TO 14	620	175	30	117	179	86	92	90	64	8	12
15 TO 19	411	109	21	72	122	60	61	56	49	5	9
20 OR MORE	609	118	24	76	236	112	102	75	45	11	22
NO REPORT	91	26	4	18	23	12	10	7	9	6	10
ECONOMICS	12,143	1,927	584	1,296	3,534	1,288	3,469	1,215	1,091	510	397
1 YEAR	372	110	47	63	29	10	110	38	38	37	10
2 TO 4	1,446	376	117	252	124	41	558	153	144	52	39
5 TO 9	1,993	430	128	291	373	143	688	251	180	27	44
10 TO 14	2,078	332	76	243	678	258	574	239	188	19	48
15 TO 19	1,729	202	57	141	621	235	537	171	133	20	45
20 OR MORE	3,720	357	112	236	1,515	546	857	296	335	222	138
NO REPORT	805	120	47	70	194	55	145	67	73	133	73
SOCIOLOGY	2,703	593	380	209	440	247	1,406	9	92	97	66
1 YEAR	35	7	7	------	1	1	23	------	1	2	1
2 TO 4	255	77	60	17	18	9	134	1	9	11	5
5 TO 9	608	181	121	58	68	45	312	1	24	15	7
10 TO 14	579	137	73	64	103	61	307	1	15	8	8
15 TO 19	394	64	38	25	80	45	227	4	8	2	9
20 OR MORE	739	105	63	41	155	78	368	1	30	49	31
NO REPORT	93	22	18	4	15	8	35	1	5	10	5
LINGUISTICS	1,351	214	132	77	171	64	695	4	81	126	60
1 YEAR	45	8	3	5	2	1	22	------	3	9	1
2 TO 4	210	51	34	17	14	6	90	1	9	34	11
5 TO 9	316	55	29	24	31	8	172	1	23	24	10
10 TO 14	257	47	26	20	40	18	132	1	10	15	12
15 TO 19	140	15	10	4	23	9	84	------	14	1	3
20 OR MORE	285	25	19	6	54	19	169	1	18	7	11
NO REPORT	98	13	11	1	7	3	26	------	4	36	12
OTHER FIELDS	20,770	4,848	517	1,591	5,704	2,867	3,851	2,571	2,333	979	484
1 YEAR	863	307	53	91	44	21	94	181	96	112	29
2 TO 4	2,850	939	137	275	246	97	667	453	301	184	60
5 TO 9	3,945	1,223	103	397	608	299	954	560	407	137	56
10 TO 14	3,575	898	66	307	1,093	588	659	423	403	45	54
15 TO 19	2,671	498	42	178	1,058	580	440	313	274	39	49
20 OR MORE	5,896	811	65	292	2,445	1,205	924	537	743	272	164
NO REPORT	970	172	51	51	210	77	113	104	109	190	72

(A)INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-12.-MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD, HIGHEST DEGREE, AND TYPE OF EMPLOYER, 1964

SCIENTIFIC AND TECHNICAL FIELD AND HIGHEST DEGREE	TOTAL	TYPE OF EMPLOYER							NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER	
ALL FIELDS	11,000	9,600	11,000	9,000	12,000	12,000	15,000	11,000	11,000
PH.D.	12,000	10,500	12,900	10,900	13,000	15,000	18,000	12,200	12,000
PROFESSIONAL MEDICAL	15,500	15,000	17,000	16,100	16,000	18,000	20,000	17,000	------
MASTER'S	10,000	7,700	10,900	8,400	10,400	12,000	15,000	10,300	9,200
BACHELOR'S	10,000	6,600	10,000	7,800	9,900	10,500	12,000	9,900	10,200
LESS THAN BACHELOR'S	10,300	8,300	9,800	9,200	10,000	11,000	14,000	------	------
NO REPORT	10,800	9,000	10,000	9,100	11,000	11,500	------	------	------
CHEMISTRY	11,000	9,300	10,900	8,700	11,000	11,700	15,000	10,900	12,000
PH.D.	13,000	10,000	12,900	11,700	12,600	14,000	15,000	12,000	------
PROFESSIONAL MEDICAL	13,000	13,000	------	------	12,500	------	------	------	------
MASTER'S	10,600	7,400	10,600	9,100	9,600	11,200	15,000	11,000	------
BACHELOR'S	9,900	6,700	9,800	7,800	7,900	10,000	13,000	9,600	------
LESS THAN BACHELOR'S	10,000	------	------	------	------	10,000	------	------	------
NO REPORT	10,000	8,000	------	------	------	10,500	------	------	------
EARTH SCIENCES	10,300	8,800	11,000	8,700	10,000	11,000	12,000	9,600	------
PH.D.	11,000	9,900	12,100	10,000	12,000	13,500	------	------	------
PROFESSIONAL MEDICAL	------	------	------	------	------	------	------	------	------
MASTER'S	9,700	7,200	10,600	8,500	9,200	10,100	15,000	------	------
BACHELOR'S	10,600	6,500	10,600	8,500	8,300	11,000	12,000	9,600	------
LESS THAN BACHELOR'S	11,500	------	10,300	------	------	12,000	------	------	------
NO REPORT	10,800	------	------	------	------	12,000	------	------	------
METEOROLOGY	10,600	10,500	10,600	10,000	12,100	11,100	------	------	------
PH.D.	13,800	12,000	14,500	------	15,500	15,600	------	------	------
PROFESSIONAL MEDICAL	------	------	------	------	------	------	------	------	------
MASTER'S	11,700	9,000	11,800	------	11,600	12,000	------	------	------
BACHELOR'S	10,300	7,300	10,300	9,000	------	10,600	------	------	------
LESS THAN BACHELOR'S	9,500	------	9,500	------	------	10,000	------	------	------
NO REPORT	9,800	------	9,500	------	------	11,000	------	------	------
PHYSICS	12,000	9,600	12,000	9,100	13,000	13,500	15,000	------	------
PH.D.	13,500	11,000	14,100	6,500	14,400	16,000	------	------	------
PROFESSIONAL MEDICAL	------	------	------	------	------	------	------	------	------
MASTER'S	10,500	8,000	11,700	------	12,200	12,500	------	------	------
BACHELOR'S	10,000	7,000	10,300	------	10,600	10,800	14,000	------	------
LESS THAN BACHELOR'S	11,700	------	------	------	------	12,000	------	------	------
NO REPORT	11,500	------	------	------	------	13,200	------	------	------
MATHEMATICS	11,000	8,700	12,100	9,500	14,000	13,000	20,000	11,500	------
PH.D.	12,000	10,300	16,000	11,400	17,700	17,000	------	------	------
PROFESSIONAL MEDICAL	------	------	------	------	------	------	------	------	------
MASTER'S	10,200	7,200	12,100	8,900	14,200	13,000	------	11,600	------
BACHELOR'S	11,500	7,700	10,600	8,500	12,000	12,000	16,000	------	------
LESS THAN BACHELOR'S	11,500	------	------	------	------	12,000	------	------	------
NO REPORT	12,000	8,800	------	------	------	12,700	------	------	------
AGRICULTURAL SCIENCES	9,200	10,200	9,300	7,300	10,500	9,000	9,000	10,000	10,100
PH.D.	11,300	11,100	11,700	10,600	12,000	12,000	------	------	------
PROFESSIONAL MEDICAL	------	------	------	------	------	------	------	------	------
MASTER'S	8,800	8,800	9,200	7,500	10,500	9,000	------	------	------
BACHELOR'S	8,400	8,300	8,700	7,200	------	8,400	8,400	------	------
LESS THAN BACHELOR'S	9,500	------	------	------	------	------	------	------	------
NO REPORT	8,000	------	------	------	------	------	------	------	------
BIOLOGICAL SCIENCES	10,700	10,000	11,000	9,900	12,800	12,500	18,000	11,000	11,500
PH.D.	11,200	10,500	12,100	11,300	12,800	14,000	17,500	11,300	12,000
PROFESSIONAL MEDICAL	16,000	15,000	17,200	16,300	16,100	18,000	20,000	17,000	------
MASTER'S	8,000	7,300	9,000	8,000	8,000	10,000	------	------	------
BACHELOR'S	7,700	5,900	9,000	7,900	6,600	9,500	12,000	------	------
LESS THAN BACHELOR'S	10,000	------	------	------	------	------	------	------	------
NO REPORT	10,000	9,500	------	------	------	------	------	------	------
PSYCHOLOGY	10,300	9,700	12,000	9,400	10,300	14,100	17,000	10,400	10,400
PH.D.	11,000	10,000	12,200	10,500	11,300	15,900	18,000	11,400	11,600
PROFESSIONAL MEDICAL	15,500	------	------	------	------	------	------	------	------
MASTER'S	8,900	8,500	10,600	8,200	8,400	12,000	14,000	9,200	8,800
BACHELOR'S	9,900	7,800	12,000	9,100	9,000	13,500	------	------	------
LESS THAN BACHELOR'S	------	------	------	------	------	------	------	------	------
NO REPORT	------	------	------	------	------	------	------	------	------

TABLE A-12.-MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD, HIGHEST DEGREE, AND TYPE OF EMPLOYER,1964-CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND HIGHEST DEGREE	TOTAL	TYPE OF EMPLOYER							NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER	
STATISTICS	12,000	10,400	13,000	9,900	12,000	12,000	------	10,500	------
PH.D.	13,000	11,000	15,000	------	14,000	16,000	------	------	------
PROFESSIONAL MEDICAL	------	------	------	------	------	------	------	------	------
MASTER'S	11,500	8,000	13,500	9,500	11,600	12,000	------	------	------
BACHELOR'S	11,500	------	12,400	9,600	10,500	11,000	------	------	------
LESS THAN BACHELOR'S	10,600	------	------	------	------	------	------	------	------
NO REPORT	12,000	------	------	------	------	------	------	------	------
ECONOMICS	12,000	10,100	13,700	11,700	15,000	14,400	20,000	14,300	14,000
PH.D.	12,100	11,000	14,800	15,000	16,500	18,900	------	15,000	------
PROFESSIONAL MEDICAL	------	------	------	------	------	------	------	------	------
MASTER'S	11,000	8,000	12,600	10,500	12,500	13,100	18,000	12,500	------
BACHELOR'S	13,500	8,000	12,500	10,000	14,300	14,000	16,000	------	------
LESS THAN BACHELOR'S	16,700	------	------	------	------	17,000	------	------	------
NO REPORT	13,000	10,800	------	------	------	15,000	------	------	------
SOCIOLOGY	10,100	10,000	12,900	10,700	12,000	14,000	------	------	------
PH.D.	10,400	10,000	13,600	11,500	12,000	------	------	------	------
PROFESSIONAL MEDICAL	------	------	------	------	------	------	------	------	------
MASTER'S	8,900	7,600	11,700	9,800	11,000	------	------	------	------
BACHELOR'S	12,000	------	------	------	------	------	------	------	------
LESS THAN BACHELOR'S	------	------	------	------	------	------	------	------	------
NO REPORT	------	------	------	------	------	------	------	------	------
LINGUISTICS	9,000	9,000	10,700	------	5,000	12,000	------	------	------
PH.D.	10,000	10,000	------	------	------	------	------	------	------
PROFESSIONAL MEDICAL	------	------	------	------	------	------	------	------	------
MASTER'S	7,100	6,900	10,000	------	------	10,000	------	------	------
BACHELOR'S	6,300	6,300	------	------	4,000	------	------	------	------
LESS THAN BACHELOR'S	------	------	------	------	------	------	------	------	------
NO REPORT	9,500	9,500	------	------	------	------	------	------	------
OTHER FIELDS	11,100	8,300	12,100	10,000	13,200	12,000	15,000	10,000	------
PH.D.	13,500	10,900	15,600	12,000	16,500	16,400	------	------	------
PROFESSIONAL MEDICAL	------	------	------	------	------	------	------	------	------
MASTER'S	10,800	7,600	13,000	10,000	13,000	13,000	17,000	10,500	------
BACHELOR'S	10,600	6,200	12,000	9,500	10,800	11,000	15,000	9,000	------
LESS THAN BACHELOR'S	12,000	------	11,000	------	------	12,000	------	------	------
NO REPORT	12,000	------	------	------	------	12,100	------	------	------

NOTE- NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE- NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-13.-MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD, AGE, AND TYPE OF EMPLOYER, 1964

SCIENTIFIC AND TECHNICAL FIELD AND AGE	TOTAL	TYPE OF EMPLOYER							NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER	
ALL FIELDS	11,000	9,600	11,000	9,000	12,000	12,000	15,000	11,000	11,000
20-24	7,000	5,200	7,000	5,800	5,700	7,200	—	—	—
25-29	8,000	7,000	8,000	6,400	8,300	8,700	9,000	7,500	7,800
30-34	9,500	8,200	9,500	7,800	10,000	10,800	12,000	9,500	9,500
35-39	11,000	9,600	10,600	9,100	12,500	12,200	15,000	11,000	11,600
40-44	12,100	10,600	12,100	9,900	14,000	13,700	15,000	12,100	12,000
45-49	13,000	11,500	12,500	10,000	15,000	15,000	16,000	13,000	11,800
50-54	13,300	11,800	13,000	10,200	15,500	15,000	20,000	13,000	15,600
55-59	13,400	11,900	13,700	10,400	15,600	16,000	16,000	13,000	—
60-64	13,300	12,000	14,400	11,000	15,000	15,500	15,000	14,000	—
65-69	12,500	12,000	14,100	11,100	13,700	15,600	15,000	—	—
70 AND OVER	12,000	10,000	13,600	—	12,000	13,000	15,000	—	—
NO REPORT	9,100	8,200	9,000	—	—	11,500	—	—	—
CHEMISTRY	11,000	9,300	10,900	8,700	11,000	11,700	15,000	10,900	12,000
20-24	6,900	5,200	7,000	6,200	5,400	7,100	—	—	—
25-29	8,000	6,800	8,000	6,300	7,500	8,300	—	7,500	—
30-34	9,900	8,200	9,600	7,900	9,500	10,400	—	10,000	—
35-39	11,200	9,600	10,600	9,200	11,000	11,900	13,000	10,000	—
40-44	12,500	11,000	12,000	9,900	12,900	13,000	14,400	12,000	—
45-49	13,700	12,000	12,100	11,000	13,600	14,000	15,000	12,000	—
50-54	14,000	12,000	12,900	9,600	14,000	14,300	20,000	—	—
55-59	13,700	11,500	13,700	10,400	13,000	14,800	17,000	—	—
60-64	13,400	11,300	14,000	11,100	13,000	14,600	—	—	—
65-69	12,700	12,000	14,000	—	—	15,000	—	—	—
70 AND OVER	12,000	11,800	—	—	—	12,000	—	—	—
NO REPORT	13,600	—	—	—	—	13,600	—	—	—
EARTH SCIENCES	10,300	8,800	11,000	8,700	10,000	11,000	12,000	9,600	—
20-24	5,800	4,900	—	—	—	6,900	—	—	—
25-29	7,400	6,500	7,500	6,600	—	7,800	—	—	—
30-34	8,700	7,600	8,700	7,800	8,000	9,100	10,000	—	—
35-39	10,300	8,600	10,500	9,200	11,000	10,800	12,000	—	—
40-44	11,600	9,600	11,300	10,000	11,600	12,000	12,000	—	—
45-49	12,500	10,300	12,100	10,400	—	14,400	13,500	—	—
50-54	14,000	11,400	13,500	10,300	—	16,000	15,000	—	—
55-59	14,000	12,000	13,300	—	—	16,500	—	—	—
60-64	14,100	12,100	14,000	—	—	18,000	—	—	—
65-69	14,000	13,000	—	—	—	18,000	—	—	—
70 AND OVER	12,000	—	—	—	—	—	—	—	—
NO REPORT	—	—	—	—	—	—	—	—	—
METEOROLOGY	10,600	10,500	10,600	10,000	12,100	11,000	—	—	—
20-24	—	—	—	—	—	—	—	—	—
25-29	8,200	8,000	8,200	—	9,400	8,700	—	—	—
30-34	9,800	8,300	9,800	—	10,000	10,400	—	—	—
35-39	10,600	10,300	10,600	—	—	11,000	—	—	—
40-44	11,500	12,000	10,900	—	14,700	12,000	—	—	—
45-49	11,000	12,500	11,000	—	14,500	11,300	—	—	—
50-54	11,000	—	11,000	—	—	11,400	—	—	—
55-59	11,300	—	11,000	—	—	—	—	—	—
60-64	12,000	—	11,600	—	—	—	—	—	—
65-69	—	—	—	—	—	—	—	—	—
70 AND OVER	—	—	—	—	—	—	—	—	—
NO REPORT	—	—	—	—	—	—	—	—	—
PHYSICS	12,000	9,600	12,000	9,100	13,000	13,500	15,000	—	—
20-24	7,400	5,500	7,500	—	—	8,000	—	—	—
25-29	8,800	7,500	9,000	—	9,000	9,600	—	—	—
30-34	10,600	8,600	10,600	8,000	11,700	12,300	—	—	—
35-39	13,100	10,700	12,500	—	14,900	15,000	—	—	—
40-44	14,500	11,800	14,000	—	16,500	16,000	—	—	—
45-49	15,000	12,500	14,500	—	17,500	17,200	—	—	—
50-54	14,500	11,400	15,900	—	17,600	17,200	—	—	—
55-59	15,000	11,400	16,500	—	18,500	17,000	—	—	—
60-64	14,400	11,800	16,300	—	—	17,700	—	—	—
65-69	11,300	10,400	—	—	—	15,000	—	—	—
70 AND OVER	10,000	—	—	—	—	—	—	—	—
NO REPORT	—	—	—	—	—	—	—	—	—
MATHEMATICS	11,000	8,700	12,100	9,500	14,000	13,000	20,000	11,500	—
20-24	7,200	6,400	—	—	—	8,000	—	—	—
25-29	8,900	7,000	9,000	7,600	10,000	10,000	—	—	—
30-34	10,500	8,100	10,600	8,100	12,400	12,000	—	—	—
35-39	12,900	9,300	12,500	9,600	15,900	14,700	—	—	—
40-44	13,700	10,100	14,100	11,400	16,700	16,100	—	—	—
45-49	13,500	10,300	14,100	—	18,900	17,500	—	—	—
50-54	13,000	10,400	14,500	—	20,000	18,000	—	—	—
55-59	12,100	10,200	15,400	—	—	22,000	—	—	—
60-64	12,000	10,000	—	—	—	19,300	—	—	—
65-69	10,500	10,100	—	—	—	—	—	—	—
70 AND OVER	9,000	—	—	—	—	—	—	—	—
NO REPORT	—	—	—	—	—	—	—	—	—

TABLE A-13.-MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD, AGE, AND TYPE OF EMPLOYER 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND AGE	TOTAL	TYPE OF EMPLOYER							NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER	
AGRICULTURAL SCIENCES	9,200	10,200	9,300	7,300	10,500	9,000	9,000	10,000	10,100
20-24	5,800	------	5,800	------	------	------	------	------	------
25-29	6,400	6,800	7,000	5,900	------	6,600	------	------	------
30-34	7,700	8,500	7,700	6,700	------	7,800	------	------	------
35-39	9,000	9,500	9,200	7,500	------	8,800	------	------	------
40-44	10,000	10,500	10,000	8,000	------	10,000	------	------	------
45-49	10,900	11,600	10,600	9,000	------	11,000	------	------	------
50-54	11,600	12,500	11,600	9,900	------	11,800	------	------	------
55-59	12,300	12,800	12,500	9,400	------	14,000	------	------	------
60-64	12,800	12,400	13,300	11,000	------	------	------	------	------
65-69	12,700	12,700	12,800	------	------	------	------	------	------
70 AND OVER	------	------	------	------	------	------	------	------	------
NO REPORT	8,700	------	------	------	------	------	------	------	------
BIOLOGICAL SCIENCES	10,700	10,000	11,000	9,900	12,800	12,500	18,000	11,000	11,500
20-24	5,000	4,800	------	------	------	------	------	------	------
25-29	6,600	6,400	7,300	6,100	5,500	8,000	------	------	------
30-34	8,400	8,000	9,000	7,300	8,500	10,500	12,300	9,000	------
35-39	10,400	10,000	10,300	9,800	12,200	12,000	18,000	------	------
40-44	12,000	11,300	12,000	10,800	15,000	14,000	20,000	------	------
45-49	13,000	12,200	12,900	10,500	16,100	15,000	17,000	------	------
50-54	13,800	13,000	13,600	11,500	18,000	16,000	25,000	------	------
55-59	14,000	13,000	14,500	13,200	18,500	17,000	20,000	------	------
60-64	13,500	12,500	14,500	12,000	17,300	17,500	------	------	------
65-69	13,000	12,500	14,000	12,000	------	------	------	------	------
70 AND OVER	13,000	11,800	------	------	------	------	------	------	------
NO REPORT	8,400	7,900	------	------	------	------	------	------	------
PSYCHOLOGY	10,300	9,700	12,000	9,400	10,300	14,100	17,000	10,400	10,400
20-24	------	------	------	------	------	------	------	------	------
25-29	7,600	7,500	8,400	7,100	7,800	10,000	------	------	------
30-34	9,000	8,500	10,300	8,600	9,100	12,000	14,400	9,300	------
35-39	10,300	9,600	11,700	9,600	11,200	14,500	18,000	11,400	------
40-44	11,000	10,000	12,500	10,000	12,000	15,300	18,000	10,500	------
45-49	11,700	10,800	12,900	10,000	11,000	15,800	18,000	12,000	------
50-54	11,800	11,000	12,700	9,900	12,000	17,000	18,000	10,900	------
55-59	11,500	11,200	12,500	9,600	11,500	18,000	15,000	------	------
60-64	11,500	11,500	12,900	10,000	9,700	------	------	------	------
65-69	10,800	10,800	------	------	------	------	------	------	------
70 AND OVER	10,000	------	------	------	------	------	------	------	------
NO REPORT	------	------	------	------	------	------	------	------	------
STATISTICS	12,000	10,400	13,000	9,900	12,000	12,000	------	10,500	------
20-24	------	------	------	------	------	------	------	------	------
25-29	8,700	8,200	8,900	------	------	8,800	------	------	------
30-34	10,400	8,500	10,300	------	12,000	11,000	------	------	------
35-39	12,000	10,100	12,000	------	12,200	12,300	------	------	------
40-44	13,000	12,000	14,000	------	------	13,200	------	------	------
45-49	14,000	12,800	14,000	------	------	14,500	------	------	------
50-54	14,000	12,500	14,800	------	------	15,000	------	------	------
55-59	14,000	12,200	15,000	------	------	14,600	------	------	------
60-64	13,000	------	------	------	------	------	------	------	------
65-69	------	------	------	------	------	------	------	------	------
70 AND OVER	------	------	------	------	------	------	------	------	------
NO REPORT	------	------	------	------	------	------	------	------	------
ECONOMICS	12,000	10,100	13,700	11,700	15,000	14,400	20,000	14,300	14,000
20-24	7,800	------	------	------	------	7,800	------	------	------
25-29	8,400	7,500	8,400	------	11,000	8,900	------	------	------
30-34	9,700	8,500	10,000	9,500	11,400	11,000	------	10,500	------
35-39	11,500	9,700	11,700	11,000	13,500	13,500	------	------	------
40-44	13,000	10,800	14,000	12,700	16,800	15,500	------	15,600	------
45-49	14,800	12,000	15,000	12,100	18,000	18,100	------	------	------
50-54	15,000	12,500	15,700	12,700	19,000	19,200	------	------	------
55-59	15,000	12,500	16,200	------	19,000	20,500	------	------	------
60-64	15,000	13,000	16,300	------	------	21,000	------	------	------
65-69	14,500	13,400	17,200	------	------	------	------	------	------
70 AND OVER	12,000	------	------	------	------	------	------	------	------
NO REPORT	------	------	------	------	------	------	------	------	------
SOCIOLOGY	10,100	10,000	12,900	10,700	12,000	14,000	------	------	------
20-24	------	------	------	------	------	------	------	------	------
25-29	7,800	7,800	------	------	------	------	------	------	------
30-34	8,500	8,200	------	------	------	------	------	------	------
35-39	9,600	9,500	12,000	------	------	------	------	------	------
40-44	10,500	10,000	------	11,200	12,700	------	------	------	------
45-49	11,000	10,800	------	------	------	------	------	------	------
50-54	12,000	12,000	------	------	------	------	------	------	------
55-59	12,500	12,000	------	------	------	------	------	------	------
60-64	11,500	11,000	------	------	------	------	------	------	------
65-69	11,800	11,500	------	------	------	------	------	------	------
70 AND OVER	------	------	------	------	------	------	------	------	------
NO REPORT	------	------	------	------	------	------	------	------	------

TABLE A-13.MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD, AGE, AND TYPE OF EMPLOYER,1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND AGE	TOTAL	TYPE OF EMPLOYER							NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER	
LINGUISTICS	9,000	9,000	10,700	------	5,000	12,000	------	------	------
20-24	------	------	------	------	------	------	------	------	------
25-29	6,900	7,000	------	------	------	------	------	------	------
30-34	7,500	7,300	------	------	------	------	------	------	------
35-39	8,500	8,500	------	------	4,500	------	------	------	------
40-44	9,300	9,000	------	------	------	------	------	------	------
45-49	10,500	10,000	------	------	------	------	------	------	------
50-54	12,000	11,800	------	------	------	------	------	------	------
55-59	11,600	11,700	------	------	------	------	------	------	------
60-64	12,400	12,600	------	------	------	------	------	------	------
65-69	------	------	------	------	------	------	------	------	------
70 AND OVER	------	------	------	------	------	------	------	------	------
NO REPORT	------	------	------	------	------	------	------	------	------
OTHER FIELDS	11,100	8,300	12,100	10,000	13,200	12,000	15,000	10,000	------
20-24	7,200	5,000	------	------	------	7,400	------	------	------
25-29	8,300	6,100	9,000	7,400	8,700	8,600	------	------	------
30-34	9,900	7,200	10,300	8,900	11,100	10,500	------	------	------
35-39	11,900	8,500	12,100	9,700	14,500	12,900	12,700	------	------
40-44	13,200	9,600	13,600	11,100	14,200	14,300	12,000	------	------
45-49	14,000	10,000	14,100	11,400	17,000	15,000	18,000	------	------
50-54	14,100	10,000	14,400	11,500	17,600	16,000	20,000	------	------
55-59	13,400	10,000	13,700	10,300	------	16,700	------	------	------
60-64	14,000	11,300	15,000	------	------	16,200	------	------	------
65-69	12,600	10,300	------	------	------	14,000	------	------	------
70 AND OVER	12,500	------	------	------	------	------	------	------	------
NO REPORT	------	------	------	------	------	------	------	------	------

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-14.-MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD, WORK ACTIVITY, AND TYPE OF EMPLOYER, 1964

SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY	TOTAL	TYPE OF EMPLOYER							NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER	
ALL FIELDS	11,000	9,600	11,000	9,000	12,000	12,000	15,000	11,000	11,000
RESEARCH AND DEVELOPMENT (A)	11,000	10,200	10,600	8,700	11,500	11,400	15,000	10,400	10,700
BASIC RESEARCH	11,000	10,000	10,700	9,000	11,000	12,300	14,700	10,000	11,700
APPLIED RESEARCH	11,000	10,400	10,600	8,500	12,000	11,500	15,000	10,800	10,300
MANAGEMENT OR ADMINISTRATION (B)	14,500	14,000	13,000	10,000	15,600	15,500	15,000	13,500	14,100
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	15,500	14,500	14,500	10,600	17,000	16,000	19,000	14,500	15,000
TEACHING	8,900	8,800	10,000	8,500	12,000	10,500	------	8,000	9,000
PRODUCTION AND INSPECTION	9,800	8,700	9,500	7,700	10,000	10,000	12,000	9,900	------
OTHER	10,500	9,600	10,300	8,900	10,000	11,000	16,000	11,000	10,000
NO REPORT	11,200	10,800	10,600	8,600	12,000	12,000	16,000	12,000	11,500
CHEMISTRY	11,000	9,300	10,900	8,700	11,000	11,700	15,000	10,900	12,000
RESEARCH AND DEVELOPMENT (A)	10,800	9,600	10,600	9,500	10,500	11,000	12,000	10,300	------
BASIC RESEARCH	11,000	9,500	10,700	9,600	10,500	12,000	------	10,800	------
APPLIED RESEARCH	11,000	10,000	10,300	9,500	10,500	11,000	------	10,000	------
MANAGEMENT OR ADMINISTRATION (B)	15,000	14,300	14,200	11,000	14,500	15,000	15,000	13,000	------
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	15,200	14,000	14,500	13,300	16,000	15,500	18,000	14,200	------
TEACHING	8,900	8,900	------	------	------	------	------	------	------
PRODUCTION AND INSPECTION	9,500	8,400	8,900	7,600	8,000	9,600	12,000	9,800	------
OTHER	11,000	10,400	9,800	8,400	10,600	11,300	15,000	------	------
NO REPORT	11,300	10,500	10,000	8,600	10,000	12,000	------	------	------
EARTH SCIENCES	10,300	8,800	11,000	8,700	10,000	11,000	12,000	9,600	------
RESEARCH AND DEVELOPMENT (A)	10,400	9,000	10,800	8,400	10,000	11,000	------	------	------
BASIC RESEARCH	10,300	9,000	11,300	8,400	9,900	11,600	------	------	------
APPLIED RESEARCH	10,500	8,400	10,400	8,500	10,200	11,000	------	------	------
MANAGEMENT OR ADMINISTRATION (B)	14,100	13,500	12,900	11,100	15,700	16,000	15,000	------	------
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	14,000	13,200	13,000	11,600	------	15,600	------	------	------
TEACHING	8,500	8,500	------	------	------	------	------	------	------
PRODUCTION AND INSPECTION	9,300	------	9,500	7,400	------	9,400	------	------	------
OTHER	10,000	7,900	10,000	8,200	8,400	10,200	12,000	9,500	------
NO REPORT	10,800	9,300	10,000	------	------	12,000	------	------	------
METEOROLOGY	10,600	10,500	10,600	10,000	12,100	11,000	------	------	------
RESEARCH AND DEVELOPMENT (A)	11,000	10,000	11,000	------	11,500	11,900	------	------	------
BASIC RESEARCH	11,200	9,900	11,700	------	11,500	12,100	------	------	------
APPLIED RESEARCH	11,000	10,000	10,600	------	11,600	11,900	------	------	------
MANAGEMENT OR ADMINISTRATION (B)	12,500	16,000	12,000	------	16,000	14,900	------	------	------
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	14,500	------	14,000	------	16,000	15,000	------	------	------
TEACHING	10,000	10,200	------	------	------	------	------	------	------
PRODUCTION AND INSPECTION	9,300	------	------	------	------	------	------	------	------
OTHER	9,800	------	9,800	------	------	10,000	------	------	------
NO REPORT	11,000	------	11,000	------	------	------	------	------	------
PHYSICS	12,000	9,600	12,000	9,100	13,000	13,500	15,000	------	------
RESEARCH AND DEVELOPMENT (A)	12,000	11,000	10,600	6,600	12,000	12,600	------	------	------
BASIC RESEARCH	12,000	10,500	11,700	6,500	12,000	13,800	------	------	------
APPLIED RESEARCH	12,000	12,800	10,300	------	12,600	12,400	------	------	------
MANAGEMENT OR ADMINISTRATION (B)	17,000	16,200	15,000	------	18,500	17,600	------	------	------
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	17,300	17,400	15,600	------	19,400	18,000	------	------	------
TEACHING	8,700	8,700	------	------	------	------	------	------	------
PRODUCTION AND INSPECTION	10,000	------	9,000	------	------	10,000	------	------	------
OTHER	12,000	9,000	11,900	------	16,000	12,000	15,000	------	------
NO REPORT	13,000	11,000	13,600	------	------	14,500	------	------	------
MATHEMATICS	11,000	8,700	12,100	9,500	14,000	13,000	20,000	11,500	------
RESEARCH AND DEVELOPMENT (A)	11,800	10,500	10,900	9,200	13,100	12,000	------	10,500	------
BASIC RESEARCH	11,000	10,000	10,300	------	12,000	13,200	------	------	------
APPLIED RESEARCH	12,400	11,300	11,700	------	14,500	12,700	------	------	------
MANAGEMENT OR ADMINISTRATION (B)	15,500	13,000	14,500	12,400	17,300	16,000	------	------	------
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	16,000	14,000	15,000	13,000	18,300	16,300	------	------	------
TEACHING	8,200	8,100	------	8,500	------	11,400	------	------	------
PRODUCTION AND INSPECTION	10,600	10,000	10,600	------	10,900	10,600	------	------	------
OTHER	12,000	10,000	10,600	9,600	12,700	12,200	20,000	------	------
NO REPORT	11,000	10,500	10,600	------	------	12,000	------	------	------

TABLE A-14.-MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD, WORK ACTIVITY, AND TYPE OF EMPLOYER, 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY	TOTAL	TYPE OF EMPLOYER							NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER	
AGRICULTURAL SCIENCES	9,200	10,200	9,300	7,300	10,500	9,000	9,000	10,000	10,100
RESEARCH AND DEVELOPMENT (A)	9,500	10,000	9,500	7,000	------	9,600	------	------	------
BASIC RESEARCH	9,500	10,000	9,900	6,700	------	------	------	------	------
APPLIED RESEARCH	9,500	10,000	9,400	7,200	------	9,800	------	------	------
MANAGEMENT OR ADMINISTRATION (B)	9,000	13,400	9,200	7,500	12,000	9,300	9,000	------	------
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	11,400	13,600	12,500	7,800	------	12,000	------	------	------
TEACHING	9,800	10,000	------	------	------	------	------	------	------
PRODUCTION AND INSPECTION	7,800	------	9,000	6,700	------	7,800	------	------	------
OTHER	8,800	10,000	9,000	7,000	------	8,600	9,000	------	------
NO REPORT	8,900	10,600	8,600	7,000	------	9,200	------	------	------
BIOLOGICAL SCIENCES	10,700	10,000	11,000	9,900	12,800	12,500	18,000	11,000	11,500
RESEARCH AND DEVELOPMENT (A)	11,000	11,000	10,500	9,700	11,900	11,700	------	9,000	11,700
BASIC RESEARCH	10,600	10,600	10,600	9,600	11,400	12,000	------	9,000	------
APPLIED RESEARCH	11,300	11,600	10,300	9,800	12,900	11,800	------	------	------
MANAGEMENT OR ADMINISTRATION (B)	14,900	15,000	14,100	11,000	17,000	15,300	12,000	13,200	------
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	15,500	15,300	15,000	13,000	18,000	16,000	------	13,600	------
TEACHING	9,000	9,000	13,000	8,200	17,000	------	------	------	------
PRODUCTION AND INSPECTION	8,400	------	8,400	7,200	------	9,000	------	------	------
OTHER	11,900	10,000	10,300	9,100	12,000	12,000	20,000	14,000	------
NO REPORT	12,000	12,000	11,700	9,900	13,500	12,500	------	------	------
PSYCHOLOGY	10,300	9,700	12,000	9,400	10,300	14,100	17,000	10,400	10,400
RESEARCH AND DEVELOPMENT (A)	10,000	9,600	11,800	8,700	10,500	12,700	12,000	9,600	------
BASIC RESEARCH	10,500	10,000	12,000	10,000	11,500	13,000	------	------	------
APPLIED RESEARCH	9,800	9,400	11,600	8,400	10,000	12,500	------	9,900	------
MANAGEMENT OR ADMINISTRATION (B)	13,000	12,500	14,000	11,000	13,000	16,000	------	12,000	------
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	14,500	13,000	14,500	12,000	14,000	17,000	------	------	------
TEACHING	9,300	9,200	------	9,100	------	------	------	------	------
PRODUCTION AND INSPECTION	------	------	------	------	------	------	------	------	------
OTHER	10,200	9,400	11,300	9,100	9,300	14,400	17,000	10,500	------
NO REPORT	10,200	9,800	------	8,900	------	------	------	------	------
STATISTICS	12,000	10,400	13,000	9,900	12,000	12,000	------	10,500	------
RESEARCH AND DEVELOPMENT (A)	11,800	11,000	12,100	9,000	11,900	12,000	------	------	------
BASIC RESEARCH	11,500	11,100	------	------	------	12,300	------	------	------
APPLIED RESEARCH	12,000	10,400	12,100	8,400	11,800	12,500	------	------	------
MANAGEMENT OR ADMINISTRATION (B)	14,200	13,500	14,500	11,000	15,000	14,400	------	------	------
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	14,600	12,500	15,000	12,000	------	15,600	------	------	------
TEACHING	10,000	10,000	------	------	------	------	------	------	------
PRODUCTION AND INSPECTION	10,600	------	12,000	------	------	10,300	------	------	------
OTHER	12,000	------	12,400	------	------	12,300	------	------	------
NO REPORT	10,800	------	------	------	------	------	------	------	------
ECONOMICS	12,000	10,100	13,700	11,700	15,000	14,400	20,000	14,300	14,000
RESEARCH AND DEVELOPMENT (A)	11,400	10,700	11,000	9,600	13,600	12,200	------	12,500	------
BASIC RESEARCH	11,000	11,300	10,300	------	15,000	------	------	------	------
APPLIED RESEARCH	11,500	10,400	11,600	9,600	13,200	12,500	------	13,000	------
MANAGEMENT OR ADMINISTRATION (B)	16,100	14,800	15,900	13,100	17,500	17,000	------	16,500	------
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	16,200	14,000	15,700	13,300	19,000	17,000	------	18,000	------
TEACHING	9,700	9,700	------	------	------	------	------	------	------
PRODUCTION AND INSPECTION	11,700	------	13,600	------	------	11,500	------	------	------
OTHER	13,000	10,300	13,300	11,000	13,000	13,500	20,000	13,000	------
NO REPORT	12,500	11,000	14,000	------	------	15,000	------	------	------
SOCIOLOGY	10,100	10,000	12,900	10,700	12,000	14,000	------	------	------
RESEARCH AND DEVELOPMENT (A)	11,000	10,900	12,000	10,300	11,000	------	------	------	------
BASIC RESEARCH	11,000	10,600	------	------	------	------	------	------	------
APPLIED RESEARCH	11,500	11,000	12,100	------	11,500	------	------	------	------
MANAGEMENT OR ADMINISTRATION (B)	13,500	13,500	14,100	11,200	14,000	------	------	------	------
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	13,500	13,100	14,100	12,000	13,500	------	------	------	------
TEACHING	9,100	9,100	------	------	------	------	------	------	------
PRODUCTION AND INSPECTION	------	------	------	------	------	------	------	------	------
OTHER	11,000	------	------	------	------	------	------	------	------
NO REPORT	11,000	10,200	------	------	------	------	------	------	------

TABLE A-14.-MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD, WORK ACTIVITY, AND TYPE OF EMPLOYER, 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY	TOTAL	TYPE OF EMPLOYER							NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER	
LINGUISTICS	9,000	9,000	10,700	------	5,000	12,000	------	------	------
RESEARCH AND DEVELOPMENT (A)	9,600	10,500	------	------	4,400	13,000	------	------	------
BASIC RESEARCH	10,000	11,000	------	------	------	------	------	------	------
APPLIED RESEARCH	8,400	------	------	------	------	------	------	------	------
MANAGEMENT OR ADMINISTRATION (B)	11,200	11,300	------	------	------	------	------	------	------
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	12,000	12,500	------	------	------	------	------	------	------
TEACHING	8,500	8,500	------	------	------	------	------	------	------
PRODUCTION AND INSPECTION	------	------	------	------	------	------	------	------	------
OTHER	8,000	------	------	------	------	------	------	------	------
NO REPORT	9,000	8,200	------	------	------	------	------	------	------
OTHER FIELDS	11,100	8,300	12,100	10,000	13,200	12,000	15,000	10,000	------
RESEARCH AND DEVELOPMENT (A)	11,000	10,700	11,000	9,500	12,200	11,000	------	------	------
BASIC RESEARCH	11,000	10,500	11,000	------	------	12,000	------	------	------
APPLIED RESEARCH	11,500	11,000	11,700	------	12,600	11,500	------	------	------
MANAGEMENT OR ADMINISTRATION (B)	15,000	13,600	14,500	11,500	17,000	15,900	14,000	------	------
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	16,000	16,000	14,900	12,000	18,500	16,500	------	------	------
TEACHING	7,900	7,800	------	7,800	------	------	------	------	------
PRODUCTION AND INSPECTION	10,000	------	10,600	9,000	------	10,000	------	------	------
OTHER	11,000	9,600	10,600	9,100	9,300	11,400	17,000	10,000	------
NO REPORT	12,000	9,200	12,500	------	------	12,600	------	------	------

(A)INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

NOTE—TEACHING SALARIES REFLECT A COMPOSITE OF ACADEMIC AND CALENDAR YEAR SALARIES FOR SECONDARY SCHOOLS AND INSTITUTIONS OF HIGHER EDUCATION. NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-15.–MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD, YEARS OF PROFESSIONAL EXPERIENCE, AND TYPE OF EMPLOYER, 1964

SCIENTIFIC AND TECHNICAL FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	TYPE OF EMPLOYER							NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER	
ALL FIELDS	11,000	9,600	11,000	9,000	12,000	12,000	15,000	11,000	11,000
1 YEAR	7,400	7,000	7,000	6,100	7,200	7,600	------	7,200	------
2 TO 4	8,000	7,500	8,000	6,800	8,400	8,600	9,000	8,000	8,400
5 TO 9	9,600	8,500	9,900	8,200	10,600	10,500	13,000	9,600	9,500
10 TO 14	11,500	10,100	11,500	9,500	13,000	12,300	15,000	11,500	11,700
15 TO 19	12,500	11,000	12,100	9,900	14,400	13,800	16,000	13,000	12,500
20 OR MORE	14,000	12,300	14,000	11,000	16,000	15,300	18,000	14,000	13,900
NO REPORT	10,900	9,500	11,300	9,300	11,000	11,800	15,000	10,000	------
CHEMISTRY	11,000	9,300	10,900	8,700	11,000	11,700	15,000	10,900	12,000
1 YEAR	7,200	6,600	7,000	6,300	6,400	7,500	------	------	------
2 TO 4	8,000	7,500	8,000	6,600	8,000	8,300	------	7,500	------
5 TO 9	9,600	8,500	9,800	8,300	10,000	10,000	------	9,700	------
10 TO 14	11,400	10,100	11,000	9,600	12,000	11,800	12,000	10,800	------
15 TO 19	12,200	11,300	12,000	9,500	12,900	12,600	12,000	11,200	------
20 OR MORE	14,000	12,000	13,700	10,300	14,000	14,500	15,000	13,000	------
NO REPORT	11,000	8,300	10,400	7,400	9,300	11,500	------	------	------
EARTH SCIENCES	10,300	8,800	11,000	8,700	10,000	11,000	12,000	9,600	------
1 YEAR	6,900	6,300	6,800	6,000	------	7,200	------	------	------
2 TO 4	7,500	7,000	7,700	6,800	7,700	7,800	------	------	------
5 TO 9	9,000	7,900	9,000	8,300	9,300	9,200	10,000	------	------
10 TO 14	10,800	9,500	11,000	9,600	11,600	11,000	12,000	------	------
15 TO 19	12,000	10,000	12,000	10,100	------	13,000	13,500	------	------
20 OR MORE	14,100	12,000	14,000	12,000	13,000	16,400	15,000	------	------
NO REPORT	10,000	9,000	11,700	------	------	10,000	------	------	------
METEOROLOGY	10,600	10,500	10,600	10,000	12,100	11,000	------	------	------
1 YEAR	7,500	------	------	------	------	------	------	------	------
2 TO 4	8,200	8,000	8,200	------	------	8,200	------	------	------
5 TO 9	9,800	8,900	9,800	------	10,300	10,200	------	------	------
10 TO 14	10,600	11,000	10,600	------	13,800	11,800	------	------	------
15 TO 19	10,800	11,500	10,500	------	------	11,000	------	------	------
20 OR MORE	12,000	12,700	11,600	------	14,300	12,000	------	------	------
NO REPORT	11,000	------	11,000	------	------	------	------	------	------
PHYSICS	12,000	9,600	12,000	9,100	13,000	13,500	15,000	------	------
1 YEAR	8,100	7,500	7,400	------	8,700	9,600	------	------	------
2 TO 4	8,600	7,800	8,700	------	9,200	9,500	------	------	------
5 TO 9	10,700	9,000	10,400	------	12,000	12,000	------	------	------
10 TO 14	13,500	11,000	12,800	------	14,500	15,000	------	------	------
15 TO 19	14,600	11,700	14,100	------	16,400	16,300	------	------	------
20 OR MORE	15,200	12,500	16,200	------	19,000	18,000	20,000	------	------
NO REPORT	9,900	8,300	10,300	------	------	12,000	------	------	------
MATHEMATICS	11,000	8,700	12,100	9,500	14,000	13,000	20,000	11,500	------
1 YEAR	8,000	7,800	------	------	------	9,000	------	------	------
2 TO 4	8,500	7,100	8,900	7,600	10,000	9,500	------	------	------
5 TO 9	10,500	8,000	10,300	9,100	12,000	11,700	------	------	------
10 TO 14	13,300	9,800	13,000	10,500	16,000	15,000	------	------	------
15 TO 19	14,400	10,400	14,500	------	18,000	17,400	------	------	------
20 OR MORE	14,000	10,800	16,200	11,900	20,000	19,500	------	------	------
NO REPORT	11,000	8,700	------	------	------	12,600	------	------	------
AGRICULTURAL SCIENCES	9,200	10,200	9,300	7,300	10,500	9,000	9,000	10,000	10,100
1 YEAR	6,200	7,000	5,800	------	------	------	------	------	------
2 TO 4	6,600	8,000	6,600	5,900	------	6,900	------	------	------
5 TO 9	8,000	9,000	8,000	6,800	------	7,800	------	------	------
10 TO 14	9,300	10,100	9,300	7,600	------	9,000	------	------	------
15 TO 19	10,300	11,300	10,600	8,500	------	10,000	------	------	------
20 OR MORE	12,000	12,700	12,300	10,000	14,000	12,100	------	------	------
NO REPORT	9,000	9,700	9,200	8,000	------	8,300	------	------	------
BIOLOGICAL SCIENCES	10,700	10,000	11,000	9,900	12,800	12,500	18,000	11,000	11,500
1 YEAR	7,200	7,200	8,400	6,000	5,400	9,000	------	------	------
2 TO 4	7,500	7,400	8,400	6,400	7,000	9,600	12,300	------	------
5 TO 9	9,200	8,700	10,000	8,200	10,800	11,800	15,000	------	------
10 TO 14	11,000	10,500	11,700	10,200	13,000	13,000	17,000	11,500	------
15 TO 19	12,400	12,000	12,300	11,000	15,000	13,800	22,000	------	------
20 OR MORE	14,100	13,600	14,500	12,100	17,300	17,000	24,000	13,500	13,000
NO REPORT	11,000	10,600	12,000	10,000	10,000	12,000	------	------	------
PSYCHOLOGY	10,300	9,700	12,000	9,400	10,300	14,100	17,000	10,400	10,400
1 YEAR	7,500	7,300	------	6,900	------	------	------	------	------
2 TO 4	8,100	8,000	10,000	7,800	8,400	10,400	------	------	------
5 TO 9	9,400	8,900	10,600	9,000	9,500	12,400	15,000	9,300	------
10 TO 14	11,000	10,000	12,500	10,000	12,000	15,000	19,000	11,400	------
15 TO 19	12,000	11,000	12,900	10,100	12,000	16,400	17,000	11,500	------
20 OR MORE	12,200	11,900	13,000	10,200	12,500	18,000	16,000	11,000	------
NO REPORT	10,700	10,000	12,900	9,900	10,200	14,700	16,000	------	------

TABLE A-15.-MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD, YEARS OF PROFESSIONAL EXPERIENCE, AND TYPE OF EMPLOYER, 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	TYPE OF EMPLOYER							NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER	
STATISTICS	12,000	10,400	13,000	9,900	12,000	12,000	------	10,500	------
1 YEAR	------	------	------	------	------	------	------	------	------
2 TO 4	8,800	8,400	8,700	------	------	9,100	------	------	------
5 TO 9	10,300	9,300	10,300	8,000	11,500	11,000	------	------	------
10 TO 14	12,000	11,100	12,500	------	12,900	12,400	------	------	------
15 TO 19	13,500	12,200	13,600	------	------	15,000	------	------	------
20 OR MORE	14,500	13,900	15,000	11,300	------	15,000	------	------	------
NO REPORT	12,000	------	------	------	------	13,400	------	------	------
ECONOMICS	12,000	10,100	13,700	11,700	15,000	14,400	20,000	14,300	14,000
1 YEAR	7,800	7,600	8,000	------	------	8,000	------	------	------
2 TO 4	8,400	8,000	9,000	8,300	10,300	8,900	------	------	------
5 TO 9	10,000	9,000	10,300	10,500	13,200	10,800	------	------	------
10 TO 14	12,000	10,500	12,900	12,500	14,300	13,600	------	13,200	------
15 TO 19	13,500	11,500	14,000	13,000	17,000	15,600	------	16,000	------
20 OR MORE	16,000	13,400	16,300	13,300	20,000	20,000	24,000	20,000	------
NO REPORT	12,000	10,300	16,000	------	------	14,000	------	------	------
SOCIOLOGY	10,100	10,000	12,900	10,700	12,000	14,000	------	------	------
1 YEAR	7,500	7,500	------	------	------	------	------	------	------
2 TO 4	8,100	8,000	------	------	------	------	------	------	------
5 TO 9	9,000	8,600	10,600	10,400	10,000	------	------	------	------
10 TO 14	10,200	10,000	12,500	11,000	10,200	------	------	------	------
15 TO 19	11,200	10,800	------	------	------	------	------	------	------
20 OR MORE	12,500	12,100	14,600	11,200	13,300	------	------	------	------
NO REPORT	10,500	10,500	------	------	------	------	------	------	------
LINGUISTICS	9,000	9,000	10,700	------	5,000	12,000	------	------	------
1 YEAR	6,500	------	------	------	------	------	------	------	------
2 TO 4	7,100	7,200	------	------	------	------	------	------	------
5 TO 9	8,000	8,000	------	------	4,600	------	------	------	------
10 TO 14	9,200	9,100	------	------	------	------	------	------	------
15 TO 19	10,000	9,900	------	------	------	------	------	------	------
20 OR MORE	12,400	12,400	------	------	------	------	------	------	------
NO REPORT	10,200	------	------	------	------	------	------	------	------
OTHER FIELDS	11,100	8,300	12,100	10,000	13,200	12,000	15,000	10,000	------
1 YEAR	7,400	5,500	------	------	------	7,500	------	------	------
2 TO 4	8,000	6,200	8,400	7,400	8,400	8,400	------	------	------
5 TO 9	9,600	7,200	10,300	8,300	10,000	10,100	------	------	------
10 TO 14	12,000	9,000	12,100	10,100	14,100	12,600	12,000	------	------
15 TO 19	13,200	9,600	13,500	11,100	14,200	14,000	14,000	------	------
20 OR MORE	14,700	10,800	14,500	11,300	17,000	16,000	18,600	13,000	------
NO REPORT	11,400	8,200	12,000	------	------	12,000	------	------	------

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-16.—MEDIAN ANNUAL SALARIES OF UNIVERSITY AND COLLEGE TEACHERS, BY FIELD, SALARY BASE, AND ACADEMIC RANK, 1964

SCIENTIFIC AND TECHNICAL FIELD AND SALARY BASE	TOTAL	ACADEMIC RANK									NO REPORT OF ACADEMIC RANK
		DEAN	PROFESSOR	ASSOCIATE PROFESSOR	ASSISTANT PROFESSOR	INSTRUCTOR	LECTURER	RESEARCH ASSOCIATE	RESEARCH ASSISTANT	OTHER	
ALL FIELDS	9,900	15,300	13,000	10,000	8,200	6,700	8,300	9,500	7,000	8,500	10,000
ACADEMIC YEAR BASE	9,000	------	12,000	9,400	8,000	6,500	7,500	------	5,600	8,300	9,100
CALENDAR YEAR BASE	11,300	15,500	14,800	11,500	9,600	7,500	9,500	9,500	7,500	8,800	11,300
NO REPORT	10,000	------	13,300	10,000	8,500	7,000	10,000	------	------	------	10,000
CHEMISTRY	9,800	------	12,600	10,000	8,200	6,800	8,000	9,500	7,000	8,500	10,000
ACADEMIC YEAR BASE	8,800	------	11,600	9,000	7,800	6,500	------	------	------	8,800	9,100
CALENDAR YEAR BASE	11,300	------	15,000	11,700	10,000	7,400	9,300	9,500	------	8,000	11,000
NO REPORT	10,000	------	13,000	9,600	8,900	------	------	------	------	------	10,000
EARTH SCIENCES	9,000	------	12,300	9,300	7,800	6,500	7,200	------	------	------	9,500
ACADEMIC YEAR BASE	8,700	------	12,000	9,100	7,600	6,400	------	------	------	------	9,000
CALENDAR YEAR BASE	10,300	------	14,000	10,500	8,300	6,800	------	------	------	------	10,000
NO REPORT	9,100	------	13,800	9,400	7,700	------	------	------	------	------	------
METEOROLOGY	10,800	------	14,300	11,000	8,600	------	------	------	------	------	11,000
ACADEMIC YEAR BASE	10,500	------	13,300	10,800	------	------	------	------	------	------	------
CALENDAR YEAR BASE	10,800	------	------	------	------	------	------	------	------	------	------
NO REPORT	------	------	------	------	------	------	------	------	------	------	------
PHYSICS	9,700	------	13,500	10,000	8,200	6,500	9,600	8,400	------	------	9,900
ACADEMIC YEAR BASE	9,100	------	13,000	9,700	8,000	6,500	7,500	------	------	------	9,500
CALENDAR YEAR BASE	11,000	------	16,000	12,200	9,900	7,400	10,000	8,700	------	------	10,000
NO REPORT	10,700	------	14,600	10,300	8,400	------	------	------	------	------	11,000
MATHEMATICS	8,800	------	13,000	9,800	8,000	6,500	8,000	------	------	8,000	9,000
ACADEMIC YEAR BASE	8,500	------	12,700	9,700	8,000	6,400	7,400	------	------	------	8,600
CALENDAR YEAR BASE	10,000	------	14,500	11,000	8,700	6,800	------	------	------	------	9,800
NO REPORT	9,500	------	12,500	10,500	8,000	6,700	------	------	------	------	9,100
AGRICULTURAL SCIENCES	10,600	------	13,000	10,500	8,900	7,000	------	------	------	------	10,400
ACADEMIC YEAR BASE	8,000	------	10,800	9,000	7,600	------	------	------	------	------	------
CALENDAR YEAR BASE	11,000	------	13,200	10,600	9,000	7,200	------	------	------	------	11,000
NO REPORT	10,300	------	12,500	------	------	------	------	------	------	------	------
BIOLOGICAL SCIENCES	10,800	------	14,000	10,700	8,700	7,400	8,100	10,000	7,000	7,600	11,000
ACADEMIC YEAR BASE	8,800	------	11,200	9,000	7,800	6,500	------	------	------	------	9,100
CALENDAR YEAR BASE	12,000	------	15,600	12,000	10,000	8,200	8,400	10,000	7,300	8,500	13,000
NO REPORT	11,200	------	14,900	11,000	9,000	------	------	------	------	------	10,000
PSYCHOLOGY	9,600	------	12,300	9,800	8,200	7,100	8,800	------	------	------	9,600
ACADEMIC YEAR BASE	9,000	------	12,000	9,300	8,000	6,800	7,800	------	------	------	9,000
CALENDAR YEAR BASE	10,800	------	13,900	11,100	9,500	8,000	9,500	------	------	------	10,400
NO REPORT	9,800	------	12,000	9,000	8,600	------	------	------	------	------	9,300
STATISTICS	10,400	------	14,100	10,300	8,500	6,500	------	------	------	------	10,400
ACADEMIC YEAR BASE	9,500	------	13,900	10,000	8,100	------	------	------	------	------	8,800
CALENDAR YEAR BASE	11,800	------	15,000	11,100	10,000	------	------	------	------	------	------
NO REPORT	10,400	------	------	------	------	------	------	------	------	------	------
ECONOMICS	10,000	15,100	13,000	10,000	8,400	6,600	7,500	------	------	------	11,000
ACADEMIC YEAR BASE	9,500	------	12,800	9,700	8,000	6,500	7,500	------	------	------	10,400
CALENDAR YEAR BASE	11,500	15,000	14,200	10,900	9,400	7,200	------	------	------	------	12,000
NO REPORT	10,500	------	13,000	10,300	8,700	------	------	------	------	------	11,400
SOCIOLOGY	9,600	------	12,000	9,600	8,000	6,800	8,500	------	------	------	9,700
ACADEMIC YEAR BASE	9,000	------	11,700	9,000	8,000	6,600	------	------	------	------	9,100
CALENDAR YEAR BASE	11,000	------	13,500	11,400	9,300	------	------	------	------	------	10,500
NO REPORT	9,100	------	10,900	------	------	------	------	------	------	------	------
LINGUISTICS	9,000	------	12,800	9,600	8,000	6,500	------	------	------	------	9,500
ACADEMIC YEAR BASE	9,000	------	12,800	9,500	7,800	6,500	------	------	------	------	9,100
CALENDAR YEAR BASE	9,000	------	12,500	10,000	8,200	------	------	------	------	------	------
NO REPORT	8,000	------	------	------	------	------	------	------	------	------	------
OTHER FIELDS	9,300	------	12,500	9,600	8,000	6,500	7,400	------	------	8,500	9,000
ACADEMIC YEAR BASE	8,700	------	12,000	9,500	7,800	6,500	------	------	------	------	8,400
CALENDAR YEAR BASE	10,500	------	14,000	10,500	9,000	7,200	------	------	------	------	9,800
NO REPORT	9,400	------	12,500	------	8,100	------	------	------	------	------	------

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-17.-NUMBER OF SCIENTISTS, BY STATE AND FIELD, 1964

STATE	TOTAL	SCIENTIFIC AND TECHNICAL FIELD													
		CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELDS
ALL LOCATIONS -	223,854	63,053	17,907	5,510	26,698	17,411	9,526	27,135	16,804	2,843	12,143	2,703	1,351	20,770
ALABAMA - - - - - - -	1,887	536	54	64	222	188	174	222	84	19	75	22	5	222
ALASKA - - - - - - - -	452	25	129	70	14	18	99	61	6	2	8	------	2	18
ARIZONA - - - - - - -	1,768	255	202	88	197	178	186	228	135	18	100	21	9	151
ARKANSAS - - - - - - -	770	168	72	16	33	38	145	140	50	5	44	6	1	52
CALIFORNIA - - - - - -	26,645	5,620	2,036	630	4,536	3,167	825	2,827	2,321	297	1,171	254	156	2,805
COLORADO - - - - - - -	3,656	538	988	156	425	221	272	359	241	35	97	26	10	288
CONNECTICUT - - - - -	4,149	1,424	121	78	610	342	60	429	336	37	207	51	36	418
DELAWARE - - - - - - -	2,387	1,550	17	10	113	42	19	94	53	19	149	5	1	315
DIST. OF COL. - - -	7,175	977	666	323	1,043	515	184	669	495	297	1,206	128	106	566
FLORIDA - - - - - - -	3,708	729	226	200	374	294	294	640	381	43	154	38	11	324
GEORGIA - - - - - - -	2,238	485	95	82	154	152	268	475	195	36	130	26	5	135
HAWAII - - - - - - - -	742	105	64	63	30	48	66	161	52	8	45	13	25	62
IDAHO - - - - - - - -	814	131	59	24	70	34	226	115	42	1	33	3	3	73
ILLINOIS - - - - - - -	11,537	3,888	496	238	1,253	787	229	1,490	976	151	816	163	81	969
INDIANA - - - - - - -	4,628	1,567	194	24	467	375	153	685	353	44	272	67	41	386
IOWA - - - - - - - - -	2,351	551	76	26	263	166	155	456	250	41	166	43	11	147
KANSAS - - - - - - - -	2,088	447	363	43	136	157	107	328	208	15	105	22	9	148
KENTUCKY - - - - - - -	1,545	513	129	21	96	74	95	251	114	11	68	44	5	124
LOUISIANA - - - - - -	3,172	772	988	59	150	142	169	369	97	18	110	26	8	264
MAINE - - - - - - - -	589	139	31	28	39	45	68	96	47	8	34	9	1	44
MARYLAND - - - - - - -	7,005	1,651	235	251	1,006	680	207	1,512	374	182	192	78	16	621
MASSACHUSETTS - - -	9,540	2,577	358	284	1,978	901	84	1,068	721	92	470	129	63	815
MICHIGAN - - - - - - -	7,573	2,435	297	100	724	510	304	952	712	82	485	137	82	753
MINNESOTA - - - - - -	3,811	1,081	149	51	359	322	259	601	370	58	201	43	13	304
MISSISSIPPI - - - - -	978	140	256	15	33	40	162	169	61	1	35	14	1	51
MISSOURI - - - - - - -	3,722	1,189	215	125	304	243	159	490	248	32	280	73	7	357
MONTANA - - - - - - -	797	64	170	44	19	41	209	131	20	8	35	7	3	46
NEBRASKA - - - - - - -	1,118	156	83	101	77	114	119	201	97	11	80	16	3	60
NEVADA - - - - - - - -	430	80	72	40	46	21	43	37	22	1	21	2	2	43
NEW HAMPSHIRE - - -	650	135	50	20	71	46	65	121	30	3	40	14	2	53
NEW JERSEY - - - - - -	11,844	5,819	156	87	1,486	775	100	796	684	136	427	61	24	1,293
NEW MEXICO - - - - - -	2,023	319	332	92	530	206	159	119	64	24	36	7	5	130
NEW YORK - - - - - - -	24,510	7,015	675	348	3,267	2,143	310	2,965	2,713	400	1,793	372	162	2,347
NORTH CAROLINA - - -	3,118	920	113	87	244	221	231	635	212	55	146	66	12	176
NORTH DAKOTA - - - -	460	90	66	16	20	29	87	63	37	------	27	3	------	22
OHIO - - - - - - - - -	10,135	4,124	412	104	1,150	625	176	937	729	122	510	128	35	1,083
OKLAHOMA - - - - - - -	3,112	726	1,028	75	154	171	102	252	120	24	104	17	4	335
OREGON - - - - - - - -	2,253	342	163	55	131	121	576	380	179	10	101	39	7	149
PENNSYLVANIA - - - -	12,813	4,898	500	97	1,572	805	256	1,428	992	133	641	135	59	1,297
RHODE ISLAND - - - -	895	247	57	7	164	66	25	92	64	4	49	18	12	90
SOUTH CAROLINA - - -	1,203	428	22	52	109	71	140	131	46	8	48	12	2	134
SOUTH DAKOTA - - - -	463	60	38	19	27	34	93	89	37	5	28	9	2	22
TENNESSEE - - - - - -	3,108	1,155	115	42	429	183	162	439	168	24	100	21	6	264
TEXAS - - - - - - - -	10,660	2,509	3,231	264	793	601	313	866	466	86	343	67	54	1,067
UTAH - - - - - - - - -	1,570	293	240	64	113	107	166	231	105	27	48	20	12	144
VERMONT - - - - - - -	343	71	15	3	21	33	35	78	28	1	25	5	2	26
VIRGINIA - - - - - - -	3,741	1,010	182	134	483	413	199	413	241	68	169	36	15	378
WASHINGTON - - - - - -	3,717	794	221	125	427	297	408	554	275	42	164	38	22	350
WEST VIRGINIA - - -	1,513	776	67	15	65	52	76	135	45	9	64	18	4	187
WISCONSIN - - - - - -	3,912	1,133	174	50	384	336	257	601	295	42	222	68	31	319
WYOMING - - - - - - -	717	84	327	8	13	20	111	67	32	3	14	2	------	36
PUERTO RICO - - - - -	355	86	19	27	26	14	11	68	19	4	22	5	16	38
FOREIGN - - - - - - -	3,464	226	863	465	248	187	128	419	162	41	233	76	147	269

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-18.-NUMBER OF SCIENTISTS, BY STATE AND HIGHEST DEGREE, 1964

STATE	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ALL LOCATIONS	223,854	79,372	5,925	61,222	72,364	2,878	2,093
ALABAMA	1,887	547	48	493	754	26	19
ALASKA	452	79	3	143	191	31	5
ARIZONA	1,768	617	18	522	549	43	19
ARKANSAS	770	259	20	223	256	6	6
CALIFORNIA	26,645	9,556	535	7,142	8,716	399	297
COLORADO	3,656	1,139	62	1,101	1,282	42	30
CONNECTICUT	4,149	1,562	92	1,184	1,232	43	36
DELAWARE	2,387	1,253	14	434	662	9	15
DISTRICT OF COLUMBIA	7,175	2,814	184	2,111	1,910	85	71
FLORIDA	3,708	1,363	88	1,023	1,127	65	42
GEORGIA	2,238	798	76	619	696	32	17
HAWAII	742	292	7	196	229	14	4
IDAHO	814	221	8	241	329	9	6
ILLINOIS	11,537	4,345	298	3,301	3,365	119	109
INDIANA	4,628	1,849	77	1,315	1,326	27	34
IOWA	2,351	949	71	732	585	5	9
KANSAS	2,088	732	39	627	661	18	11
KENTUCKY	1,545	531	62	414	511	16	11
LOUISIANA	3,172	795	57	919	1,340	41	20
MAINE	589	214	8	162	190	11	4
MARYLAND	7,005	2,617	503	1,668	2,088	71	58
MASSACHUSETTS	9,540	3,782	405	2,558	2,583	119	93
MICHIGAN	7,573	2,870	142	2,369	2,048	81	63
MINNESOTA	3,811	1,461	127	954	1,214	29	26
MISSISSIPPI	978	280	26	290	356	20	6
MISSOURI	3,722	1,298	145	1,035	1,166	46	32
MONTANA	797	192	6	259	316	15	9
NEBRASKA	1,118	391	21	384	283	28	11
NEVADA	430	109	------	118	182	17	4
NEW HAMPSHIRE	650	265	22	174	179	6	4
NEW JERSEY	11,844	4,277	121	3,070	4,093	143	140
NEW MEXICO	2,023	752	17	575	629	41	9
NEW YORK	24,510	9,222	1,051	6,697	6,986	298	256
NORTH CAROLINA	3,118	1,391	140	710	816	38	23
NORTH DAKOTA	460	152	3	156	140	5	4
OHIO	10,135	3,257	236	2,731	3,719	88	104
OKLAHOMA	3,112	804	38	870	1,317	49	34
OREGON	2,253	774	46	562	839	22	10
PENNSYLVANIA	12,813	4,494	398	3,370	4,309	134	108
RHODE ISLAND	895	356	11	223	287	10	8
SOUTH CAROLINA	1,203	403	14	294	462	20	10
SOUTH DAKOTA	463	168	4	155	125	10	1
TENNESSEE	3,108	1,217	94	770	982	25	20
TEXAS	10,660	2,514	151	2,975	4,728	186	106
UTAH	1,570	498	41	423	582	13	13
VERMONT	343	143	22	100	75	1	2
VIRGINIA	3,741	1,220	88	1,077	1,272	58	26
WASHINGTON	3,717	1,197	119	989	1,346	42	24
WEST VIRGINIA	1,513	422	21	367	670	22	11
WISCONSIN	3,912	1,509	82	1,149	1,123	17	32
WYOMING	717	134	5	243	324	10	1
PUERTO RICO	355	131	7	92	111	8	6
FOREIGN	3,464	1,157	52	913	1,103	165	74

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

3

TABLE A-19.—NUMBER OF SCIENTISTS, BY STATE AND TYPE OF EMPLOYER, 1964

STATE	TOTAL	TYPE OF EMPLOYER								NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER		
ALL LOCATIONS	223,854	77,727	23,405	7,472	5,522	8,722	84,421	4,277	1,434	9,617	1,257
ALABAMA	1,887	576	412	98	115	62	547	18	8	42	9
ALASKA	452	98	149	71	42	6	80	3	-----	2	1
ARIZONA	1,768	810	252	64	43	45	383	48	13	96	14
ARKANSAS	770	381	115	34	22	8	167	7	1	32	3
CALIFORNIA	26,645	8,966	2,186	1,135	570	1,391	10,195	694	119	1,244	145
COLORADO	3,656	1,099	890	118	148	153	940	110	20	149	29
CONNECTICUT	4,149	1,404	125	137	24	132	1,991	65	15	227	29
DELAWARE	2,387	205	10	18	13	15	2,020	9	4	86	7
DISTRICT OF COLUMBIA	7,175	639	4,766	80	400	522	393	82	123	143	27
FLORIDA	3,708	1,597	389	203	157	81	863	93	19	273	33
GEORGIA	2,238	984	336	94	132	17	515	44	17	84	15
HAWAII	742	324	125	50	69	31	100	11	4	27	1
IDAHO	814	288	201	57	15	------	204	8	11	25	5
ILLINOIS	11,537	4,978	461	401	133	560	4,149	211	74	505	65
INDIANA	4,628	2,392	134	116	24	46	1,621	44	8	214	29
IOWA	2,351	1,653	112	94	3	24	321	18	13	93	20
KANSAS	2,088	1,121	95	84	62	64	472	48	8	113	21
KENTUCKY	1,545	716	151	52	36	33	471	17	6	56	7
LOUISIANA	3,172	973	255	62	48	11	1,628	80	14	85	16
MAINE	589	273	32	50	25	41	130	6	-----	32	-----
MARYLAND	7,005	1,542	2,939	136	662	118	1,229	55	25	264	35
MASSACHUSETTS	9,540	3,944	630	166	153	666	3,152	121	64	586	58
MICHIGAN	7,573	3,311	202	286	53	182	3,049	99	26	332	33
MINNESOTA	3,811	1,636	207	161	13	134	1,440	33	20	143	24
MISSISSIPPI	978	360	184	47	19	2	301	25	2	33	5
MISSOURI	3,722	1,446	278	135	66	143	1,381	61	40	151	21
MONTANA	797	283	225	51	27	5	149	15	3	29	10
NEBRASKA	1,118	596	138	51	104	22	126	14	7	51	9
NEVADA	430	152	105	30	22	1	94	7	4	12	3
NEW HAMPSHIRE	650	409	57	28	14	11	76	10	1	36	8
NEW JERSEY	11,844	1,884	448	170	74	235	8,242	194	43	511	43
NEW MEXICO	2,023	880	334	66	106	41	496	18	20	52	10
NEW YORK	24,510	8,375	649	904	315	1,717	10,348	721	208	1,125	148
NORTH CAROLINA	3,118	1,664	225	117	52	80	779	26	11	152	12
NORTH DAKOTA	460	239	89	43	16	4	39	5	2	21	2
OHIO	10,135	3,131	934	280	200	559	4,364	123	81	407	56
OKLAHOMA	3,112	803	188	51	68	49	1,701	115	4	114	19
OREGON	2,253	1,119	496	130	16	37	282	39	5	112	17
PENNSYLVANIA	12,813	4,394	608	322	51	582	5,958	171	73	588	66
RHODE ISLAND	895	506	55	24	21	22	195	9	1	53	9
SOUTH CAROLINA	1,203	473	85	57	52	4	447	24	17	41	3
SOUTH DAKOTA	463	267	90	32	11	10	27	6	-----	20	-----
TENNESSEE	3,108	983	235	108	19	86	1,499	29	39	96	14
TEXAS	10,660	2,610	609	184	307	165	5,811	499	49	374	52
UTAH	1,570	661	276	64	44	13	403	24	3	71	11
VERMONT	343	226	12	21	2	12	34	11	1	20	4
VIRGINIA	3,741	1,101	581	149	192	193	1,267	40	23	184	11
WASHINGTON	3,717	1,555	391	167	69	40	1,252	54	33	135	21
WEST VIRGINIA	1,513	392	91	61	2	18	876	10	9	50	4
WISCONSIN	3,912	2,199	184	201	16	84	925	36	25	203	39
WYOMING	717	189	138	41	5	6	282	29	1	26	-----
PUERTO RICO	355	173	50	36	19	2	48	10	1	11	5
FOREIGN	3,464	747	476	135	651	237	959	28	116	86	29

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-20.—NUMBER OF SCIENTISTS, BY STATE AND WORK ACTIVITY, 1964

STATE	TOTAL	WORK ACTIVITY								NOT EMPLOYED	NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER		
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D					
ALL LOCATIONS	223,854	77,699	35,781	30,280	46,255	24,568	41,209	16,582	26,301	9,617	6,191
ALABAMA	1,887	622	220	292	443	243	375	178	171	42	56
ALASKA	452	118	80	33	125	43	50	14	131	2	12
ARIZONA	1,768	517	238	192	316	133	470	72	238	96	59
ARKANSAS	770	182	91	82	186	54	208	65	78	32	19
CALIFORNIA	26,645	10,558	4,717	3,902	5,375	3,130	4,023	1,624	3,097	1,244	724
COLORADO	3,656	1,147	596	451	648	268	697	197	706	149	112
CONNECTICUT	4,149	1,689	745	633	860	522	707	254	308	227	104
DELAWARE	2,387	1,067	374	514	616	383	91	252	219	86	56
DISTRICT OF COLUMBIA	7,175	2,504	1,225	1,134	2,638	1,621	409	243	1,036	143	202
FLORIDA	3,708	1,121	543	413	743	349	775	203	478	273	115
GEORGIA	2,238	548	262	249	542	214	558	158	269	84	79
HAWAII	742	218	101	105	159	58	153	63	95	27	27
IDAHO	814	210	72	112	253	72	165	47	89	25	25
ILLINOIS	11,537	4,074	2,092	1,550	2,222	1,200	2,400	959	1,065	505	312
INDIANA	4,628	1,505	770	519	741	380	1,364	357	313	214	134
IOWA	2,351	814	507	271	290	120	822	101	161	93	70
KANSAS	2,088	465	262	170	276	113	689	124	356	113	65
KENTUCKY	1,545	423	211	138	250	101	431	172	160	56	53
LOUISIANA	3,172	658	288	277	532	186	569	421	820	85	87
MAINE	589	115	54	43	114	42	210	37	63	32	18
MARYLAND	7,005	3,347	1,816	1,177	1,606	1,149	660	361	586	264	181
MASSACHUSETTS	9,540	4,121	2,311	1,272	1,615	1,016	1,786	460	726	586	246
MICHIGAN	7,573	2,656	1,218	1,058	1,445	783	1,768	576	617	332	179
MINNESOTA	3,811	1,322	590	518	737	412	893	247	356	143	113
MISSISSIPPI	978	211	107	97	201	49	225	71	205	33	32
MISSOURI	3,722	1,105	493	458	779	365	844	341	394	151	108
MONTANA	797	137	76	57	203	42	193	43	161	29	31
NEBRASKA	1,118	251	133	106	204	75	358	45	156	51	53
NEVADA	430	116	30	66	103	39	76	23	86	12	14
NEW HAMPSHIRE	650	185	130	35	100	40	246	15	53	36	15
NEW JERSEY	11,844	5,136	1,712	2,297	2,818	1,894	1,037	1,273	801	511	268
NEW MEXICO	2,023	828	384	349	439	247	227	119	321	52	37
NEW YORK	24,510	8,479	3,944	3,090	5,069	2,616	4,444	1,640	2,899	1,125	654
NORTH CAROLINA	3,118	1,087	635	378	524	258	854	161	253	152	87
NORTH DAKOTA	460	119	64	53	83	24	140	19	66	21	12
OHIO	10,135	3,567	1,344	1,529	2,103	1,288	1,962	926	893	407	277
OKLAHOMA	3,112	794	318	372	572	259	497	268	786	114	81
OREGON	2,253	586	331	223	578	121	609	81	215	112	72
PENNSYLVANIA	12,813	4,863	2,052	1,933	2,517	1,454	2,403	1,095	1,045	588	302
RHODE ISLAND	895	297	196	70	142	73	251	59	52	53	41
SOUTH CAROLINA	1,203	286	92	145	310	129	293	128	107	41	38
SOUTH DAKOTA	463	99	47	50	83	26	180	16	44	20	21
TENNESSEE	3,108	1,212	611	387	597	348	591	277	245	96	90
TEXAS	10,660	2,559	990	1,154	2,020	809	1,552	1,257	2,580	374	318
UTAH	1,570	404	203	152	326	125	358	111	240	71	60
VERMONT	343	72	47	17	54	15	152	11	21	20	13
VIRGINIA	3,741	1,242	377	653	873	501	721	290	342	184	89
WASHINGTON	3,717	1,267	560	553	781	322	762	254	397	135	121
WEST VIRGINIA	1,513	516	136	221	316	167	275	240	89	50	27
WISCONSIN	3,912	1,338	821	394	632	314	1,069	232	302	203	136
WYOMING	717	114	57	54	155	36	112	42	255	26	13
PUERTO RICO	355	74	36	33	74	33	97	31	50	11	18
FOREIGN	3,464	754	472	249	867	303	408	129	1,105	86	115

(A) INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B) INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-21.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STATE AND FIELD, 1964

STATE	TOTAL	SCIENTIFIC AND TECHNICAL FIELD												
		CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELDS
ALL LOCATIONS	11,000	11,000	10,300	10,600	12,000	11,000	9,200	10,700	10,300	12,000	12,000	10,100	9,000	11,100
ALABAMA	10,300	10,700	8,700	10,100	11,000	10,300	9,000	10,500	10,000	------	11,100	------	------	10,500
ALASKA	10,900	------	11,000	10,100	------	------	10,300	11,500	------	------	------	------	------	------
ARIZONA	9,800	8,600	9,500	10,300	10,600	10,700	9,000	9,500	10,000	------	10,000	------	------	10,600
ARKANSAS	9,300	9,700	9,000	------	------	9,000	8,700	10,000	9,500	------	9,800	------	------	8,800
CALIFORNIA	12,000	11,800	11,000	11,000	13,200	12,000	10,000	11,000	11,400	12,100	12,800	10,600	9,500	12,500
COLORADO	10,500	9,900	11,300	11,000	10,800	10,000	9,200	10,600	10,000	10,500	10,400	------	------	10,400
CONNECTICUT	10,900	11,000	9,400	12,000	11,200	11,000	9,000	10,700	10,000	11,400	11,000	10,500	------	10,400
DELAWARE	13,500	13,900	------	------	14,000	11,400	------	12,000	10,300	------	15,200	------	------	13,000
DIST. OF COL.	13,000	12,000	12,000	12,200	12,600	14,000	14,500	13,000	12,800	14,000	14,500	13,600	10,000	14,000
FLORIDA	10,100	10,000	9,500	10,500	11,000	11,000	9,100	10,000	10,000	12,000	12,200	10,500	------	10,700
GEORGIA	10,000	9,900	9,500	9,800	10,100	9,500	9,300	10,000	10,000	9,700	10,800	9,200	------	10,000
HAWAII	10,000	9,700	10,500	------	------	10,800	9,400	10,000	10,500	------	10,800	------	------	10,600
IDAHO	9,000	9,900	9,500	------	11,200	9,000	8,400	8,700	7,800	------	10,000	------	------	9,100
ILLINOIS	10,800	11,000	9,500	10,800	11,400	10,500	9,800	11,000	10,000	11,000	12,600	10,500	10,000	10,200
INDIANA	10,200	11,000	9,700	------	10,000	9,200	9,500	10,600	9,900	12,500	11,100	9,500	9,500	9,800
IOWA	10,000	9,500	9,000	------	9,500	9,200	9,300	11,400	9,300	------	10,500	10,000	------	9,000
KANSAS	9,300	9,500	9,900	------	8,800	8,000	9,200	9,100	10,600	------	9,400	------	------	8,000
KENTUCKY	9,800	9,800	9,000	------	8,200	7,200	9,000	11,000	10,500	------	10,800	9,000	------	9,600
LOUISIANA	10,000	10,100	10,300	9,800	9,000	9,200	8,900	10,000	9,800	------	10,500	------	------	11,200
MAINE	8,800	9,500	------	------	8,800	7,300	7,800	9,200	9,100	------	9,900	------	------	8,000
MARYLAND	11,700	11,000	10,400	11,700	12,000	12,100	10,800	12,100	11,000	12,400	11,000	11,000	------	12,000
MASSACHUSETTS	11,000	10,900	10,000	12,000	12,200	12,000	10,000	10,100	10,000	12,500	11,500	10,500	9,100	11,000
MICHIGAN	10,800	11,100	9,000	10,600	11,000	10,000	9,000	11,000	10,200	11,600	12,000	11,000	9,000	11,000
MINNESOTA	10,500	11,100	9,000	10,000	10,400	10,300	9,700	10,500	10,800	10,400	11,000	10,600	------	10,000
MISSISSIPPI	9,300	9,000	10,000	------	7,500	7,500	8,500	9,500	9,300	------	9,600	------	------	9,300
MISSOURI	10,300	11,000	9,000	10,500	10,000	9,600	8,800	11,500	10,000	10,500	11,500	9,400	------	10,000
MONTANA	9,000	8,500	10,000	9,500	------	7,800	8,400	9,000	------	------	9,600	------	------	8,800
NEBRASKA	9,400	9,000	8,400	------	8,500	10,000	9,300	9,600	9,500	------	9,800	------	------	9,100
NEVADA	9,800	9,600	10,000	------	10,000	------	9,000	8,000	------	------	------	------	------	10,700
NEW HAMPSHIRE	9,500	9,600	9,800	------	9,300	8,500	8,000	9,900	------	------	11,400	------	------	9,600
NEW JERSEY	12,000	12,000	9,000	10,600	13,400	12,500	10,400	12,000	10,000	12,000	12,000	9,900	------	12,000
NEW MEXICO	11,900	13,000	10,000	11,000	14,300	12,000	9,300	9,600	10,200	------	10,000	------	------	12,000
NEW YORK	11,800	11,700	9,500	10,500	12,000	12,000	10,300	12,000	10,600	12,000	13,500	11,000	9,000	12,000
NORTH CAROLINA	10,000	11,000	8,800	9,000	9,400	9,100	9,000	10,300	9,700	12,000	10,300	9,600	------	10,000
NORTH DAKOTA	8,700	9,000	8,200	------	------	8,000	9,000	9,600	9,000	------	------	------	------	------
OHIO	10,600	11,000	9,300	10,700	11,000	10,300	9,100	10,600	9,800	11,000	11,200	9,600	8,800	10,500
OKLAHOMA	10,800	11,000	10,900	10,000	10,400	9,600	8,600	10,300	10,000	------	10,700	------	------	12,000
OREGON	9,200	9,500	9,100	9,800	8,800	8,600	8,700	10,000	10,000	------	10,500	9,300	------	9,700
PENNSYLVANIA	11,000	11,000	9,900	9,800	11,500	11,000	9,500	11,000	9,900	11,000	12,000	10,100	9,400	11,000
RHODE ISLAND	10,000	10,000	9,100	------	9,500	8,800	------	9,300	9,000	------	12,000	------	------	11,000
SOUTH CAROLINA	9,900	10,500	------	------	10,000	9,000	9,000	9,000	9,800	------	10,300	------	------	9,500
SOUTH DAKOTA	8,600	8,400	8,700	------	------	6,700	8,400	9,100	9,200	------	9,300	------	------	------
TENNESSEE	10,800	11,300	9,000	9,800	12,000	9,000	8,800	11,200	9,300	------	10,500	------	------	11,200
TEXAS	10,300	10,300	10,800	9,800	10,400	10,000	9,000	10,000	10,000	10,500	11,400	9,500	9,000	11,000
UTAH	10,000	10,000	9,800	10,000	9,200	10,000	9,600	10,100	8,700	10,100	10,300	------	------	10,500
VERMONT	8,600	9,000	------	------	------	8,500	7,600	10,300	------	------	------	------	------	------
VIRGINIA	10,600	10,800	10,600	10,400	10,300	12,000	9,000	10,100	10,200	11,700	10,800	9,100	------	12,000
WASHINGTON	10,000	10,000	10,000	10,100	10,800	10,500	8,700	10,400	9,800	11,500	11,000	9,000	------	10,400
WEST VIRGINIA	10,000	11,000	8,600	------	8,500	7,800	8,200	9,700	9,000	------	10,000	------	------	10,000
WISCONSIN	9,800	10,000	9,500	------	9,600	9,800	9,300	10,000	10,100	9,000	11,400	9,400	9,500	9,100
WYOMING	9,500	9,400	10,000	------	------	------	8,600	8,400	8,900	------	------	------	------	10,400
PUERTO RICO	9,500	9,000	------	------	------	------	------	10,000	------	------	------	------	------	10,300
FOREIGN	11,300	10,000	12,100	10,300	7,000	11,600	12,000	9,600	10,000	13,600	14,500	11,200	5,300	12,000

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-22.—MEDIAN ANNUAL SALARIES OF FULL TIME EMPLOYED CIVILIAN SCIENTISTS, BY STATE AND HIGHEST DEGREE, 1964

STATE	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ALL LOCATIONS	11,000	12,000	15,500	10,000	10,000	10,300	10,800
ALABAMA	10,300	1,100	16,500	10,000	10,000	------	------
ALASKA	10,900	13,000	------	10,600	10,300	------	------
ARIZONA	9,800	10,400	------	8,900	9,300	9,200	------
ARKANSAS	9,300	10,000	------	8,200	8,600	------	------
CALIFORNIA	12,000	13,000	16,000	11,000	11,000	11,000	12,000
COLORADO	10,500	11,600	15,000	9,800	10,000	10,300	------
CONNECTICUT	10,900	12,000	15,500	10,000	10,000	9,500	9,500
DELAWARE	13,500	14,500	------	12,000	11,800	------	------
DISTRICT OF COLUMBIA	13,000	14,400	16,200	12,500	12,000	12,000	12,300
FLORIDA	10,100	11,200	16,200	9,000	9,500	10,500	9,000
GEORGIA	10,000	10,800	15,000	8,700	9,500	------	------
HAWAII	10,000	11,000	------	9,300	9,000	------	------
IDAHO	9,000	10,300	------	8,700	8,500	------	------
ILLINOIS	10,800	12,000	17,500	9,800	9,700	10,600	10,200
INDIANA	10,200	11,500	17,000	8,600	9,400	------	9,600
IOWA	10,000	11,200	18,000	8,000	8,700	------	------
KANSAS	9,300	10,300	18,600	7,500	9,100	------	------
KENTUCKY	9,800	11,000	16,000	8,200	9,000	------	------
LOUISIANA	10,000	10,500	17,000	9,600	10,000	9,800	------
MAINE	9,800	10,200	------	7,700	7,500	------	------
MARYLAND	11,700	12,600	15,000	11,000	10,600	10,300	12,000
MASSACHUSETTS	11,000	12,000	13,000	10,500	10,300	10,300	10,500
MICHIGAN	10,800	12,000	17,500	9,600	10,000	11,000	9,700
MINNESOTA	10,500	12,000	14,500	9,100	9,500	------	------
MISSISSIPPI	9,300	10,000	------	8,300	9,000	------	------
MISSOURI	10,300	11,800	15,000	9,100	9,600	10,300	9,500
MONTANA	9,000	10,000	------	8,500	9,000	------	------
NEBRASKA	9,400	10,100	------	7,500	9,100	------	------
NEVADA	9,800	11,400	------	9,800	9,300	------	------
NEW HAMPSHIRE	9,500	10,300	------	8,000	8,500	------	------
NEW JERSEY	12,000	13,700	18,500	11,000	10,300	10,000	11,500
NEW MEXICO	11,900	13,800	------	10,600	10,500	11,000	------
NEW YORK	11,800	12,700	15,500	10,500	10,600	10,300	11,000
NORTH CAROLINA	10,000	11,000	15,000	8,400	9,000	9,000	------
NORTH DAKOTA	8,700	9,800	------	7,800	8,300	------	------
OHIO	10,600	12,000	16,000	9,800	9,900	10,000	11,000
OKLAHOMA	10,800	12,000	15,000	10,000	10,300	10,500	------
OREGON	9,200	10,500	16,300	8,200	8,400	------	------
PENNSYLVANIA	11,000	12,100	15,500	9,700	10,000	10,200	10,000
RHODE ISLAND	10,000	10,000	------	9,000	10,000	------	------
SOUTH CAROLINA	9,900	10,500	------	8,500	9,700	------	------
SOUTH DAKOTA	8,600	9,900	------	7,200	7,500	------	------
TENNESSEE	10,800	12,000	16,000	9,500	10,000	------	------
TEXAS	10,300	11,700	15,000	9,800	10,000	10,000	11,000
UTAH	10,000	10,200	15,000	9,100	9,700	------	------
VERMONT	8,600	9,200	------	7,400	8,500	------	------
VIRGINIA	10,600	12,000	15,000	10,000	10,000	10,000	------
WASHINGTON	10,000	11,400	14,000	9,400	9,200	------	------
WEST VIRGINIA	10,000	12,000	------	9,000	9,500	------	------
WISCONSIN	9,800	11,000	15,000	8,700	8,600	------	------
WYOMING	9,500	10,000	------	9,000	9,800	------	------
PUERTO RICO	9,500	10,600	------	6,700	7,300	------	------
FOREIGN	11,300	10,500	14,000	11,000	12,000	12,600	9,900

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-23.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STATE AND TYPE OF EMPLOYER, 1964

STATE	TOTAL	TYPE OF EMPLOYER							NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	STATE GOVERNMENT	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER	
ALL LOCATIONS	11,000	9,600	11,000	9,000	12,000	12,000	15,000	11,000	11,000
ALABAMA	10,300	9,600	11,800	8,700	11,100	10,300	------	------	------
ALASKA	10,900	11,500	10,100	10,700	------	12,000	------	------	------
ARIZONA	9,800	9,400	9,800	8,000	11,500	11,000	------	------	------
ARKANSAS	9,300	9,200	9,500	7,300	------	9,400	------	------	------
CALIFORNIA	12,000	10,200	10,800	11,000	14,000	13,000	17,000	11,000	13,200
COLORADO	10,500	9,500	11,000	8,700	10,900	11,000	13,000	------	------
CONNECTICUT	10,900	9,000	10,500	9,900	10,800	12,000	18,000	------	------
DELAWARE	13,500	9,800	------	------	------	13,900	------	------	------
DISTRICT OF COLUMBIA	13,000	9,800	13,000	11,800	14,500	14,900	18,000	14,500	------
FLORIDA	10,100	10,000	10,400	8,000	10,000	11,100	14,300	------	------
GEORGIA	10,000	9,400	10,300	8,700	------	10,300	------	------	------
HAWAII	10,000	10,000	9,800	10,500	12,200	10,500	------	------	------
IDAHO	9,000	8,600	9,000	7,500	------	10,200	------	------	------
ILLINOIS	10,800	10,000	11,000	9,400	12,000	11,400	18,000	11,600	------
INDIANA	10,200	9,500	9,800	8,400	9,600	11,700	------	------	------
IOWA	10,000	9,800	10,300	7,900	------	10,400	------	------	------
KANSAS	9,300	8,500	9,300	8,200	11,600	10,400	------	------	------
KENTUCKY	9,800	9,000	10,000	7,300	10,500	10,300	------	------	------
LOUISIANA	10,000	9,000	10,100	7,200	------	10,600	14,400	------	------
MAINE	8,800	8,100	9,000	7,600	11,400	10,000	------	------	------
MARYLAND	11,700	10,000	12,000	9,700	11,000	12,500	------	------	------
MASSACHUSETTS	11,000	9,600	11,700	9,300	11,500	12,500	16,300	10,000	------
MICHIGAN	10,800	10,000	9,800	9,100	11,500	12,000	15,000	------	------
MINNESOTA	10,500	9,500	10,000	8,400	12,500	11,900	------	------	------
MISSISSIPPI	9,300	8,500	9,800	7,300	------	10,100	------	------	------
MISSOURI	10,300	9,500	10,000	7,800	10,600	12,000	15,000	9,500	------
MONTANA	9,000	8,600	9,300	8,200	------	9,700	------	------	------
NEBRASKA	9,400	9,000	10,600	6,800	------	10,000	------	------	------
NEVADA	9,800	9,200	9,500	10,000	------	10,500	------	------	------
NEW HAMPSHIRE	9,500	9,300	10,100	7,000	------	11,000	------	------	------
NEW JERSEY	12,000	9,000	12,000	9,100	11,000	12,500	16,000	12,000	------
NEW MEXICO	11,900	12,900	10,300	10,500	13,000	11,800	------	------	------
NEW YORK	11,800	10,000	10,900	10,000	11,500	13,000	17,500	11,700	12,500
NORTH CAROLINA	10,000	9,500	9,800	8,200	13,000	11,400	------	------	------
NORTH DAKOTA	8,700	8,700	9,800	6,800	------	10,000	------	------	------
OHIO	10,600	9,300	11,300	8,600	11,800	11,200	17,500	11,000	------
OKLAHOMA	10,800	9,400	10,300	8,200	11,000	11,400	12,000	------	------
OREGON	9,200	9,500	9,000	7,900	11,200	9,800	------	------	------
PENNSYLVANIA	11,000	9,300	11,000	8,200	10,700	12,000	15,000	9,000	------
RHODE ISLAND	10,000	9,000	10,000	------	------	12,000	------	------	------
SOUTH CAROLINA	9,900	8,600	10,000	8,300	------	11,000	------	------	------
SOUTH DAKOTA	8,600	8,700	8,700	7,100	------	------	------	------	------
TENNESSEE	10,800	9,000	10,600	8,200	11,700	12,000	------	11,600	------
TEXAS	10,300	9,000	10,000	7,600	10,000	11,200	13,500	10,000	------
UTAH	10,000	9,400	10,100	7,200	------	10,600	------	------	------
VERMONT	8,600	8,500	------	------	------	12,000	------	------	------
VIRGINIA	10,600	9,000	11,000	8,000	14,800	11,700	------	------	------
WASHINGTON	10,000	9,100	9,300	8,200	11,000	11,400	15,000	12,000	------
WEST VIRGINIA	10,000	8,800	10,000	6,300	------	11,000	------	------	------
WISCONSIN	9,800	9,500	10,600	8,500	10,000	10,500	------	------	------
WYOMING	9,500	8,700	9,300	7,400	------	10,000	------	------	------
PUERTO RICO	9,500	8,300	10,600	7,200	------	11,700	------	------	------
FOREIGN	11,300	8,500	12,900	7,600	9,600	13,000	------	10,000	------

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-24.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STATE AND WORK ACTIVITY, 1964

STATE	TOTAL	WORK ACTIVITY								NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER	
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D				
ALL LOCATIONS	11,000	11,000	11,000	11,000	14,500	15,500	8,900	9,800	10,500	11,200
ALABAMA	10,300	10,400	10,700	10,600	12,900	14,000	9,000	9,500	10,000	9,600
ALASKA	10,900	10,800	11,000	11,000	11,500	12,200	9,900	------	10,700	------
ARIZONA	9,800	10,000	9,900	10,000	11,800	13,100	9,000	8,400	10,000	10,000
ARKANSAS	9,300	9,900	9,600	10,000	9,800	12,000	8,300	9,000	9,500	------
CALIFORNIA	12,000	12,000	12,000	12,000	15,400	16,700	9,500	10,000	11,300	12,000
COLORADO	10,500	10,600	11,400	10,100	12,700	14,000	8,800	9,000	10,400	10,800
CONNECTICUT	10,900	10,400	10,000	10,900	15,000	15,500	8,700	10,000	10,300	12,500
DELAWARE	13,500	12,600	12,800	12,800	18,600	18,700	9,200	12,000	13,200	14,400
DISTRICT OF COLUMBIA	13,000	12,000	11,700	12,000	15,700	16,100	9,400	12,000	12,000	13,000
FLORIDA	10,100	10,000	10,000	10,200	12,700	14,100	9,000	9,000	10,000	10,000
GEORGIA	10,000	9,900	9,700	10,000	12,000	13,300	8,600	9,400	10,000	10,900
HAWAII	10,000	10,100	10,000	10,500	12,300	13,500	9,100	9,000	10,000	------
IDAHO	9,000	9,400	10,300	9,000	9,300	12,500	8,000	8,600	9,300	------
ILLINOIS	10,800	10,600	11,100	10,500	15,000	15,000	9,000	9,600	10,200	11,000
INDIANA	10,200	10,800	11,000	11,000	14,000	15,000	8,800	9,700	9,800	11,500
IOWA	10,000	10,000	10,400	9,600	13,800	15,000	9,000	8,300	9,200	11,700
KANSAS	9,300	9,900	9,600	10,000	13,000	14,400	8,000	8,500	10,000	------
KENTUCKY	9,800	10,200	10,800	9,800	12,500	13,200	8,300	9,000	9,600	9,600
LOUISIANA	10,000	10,000	10,000	10,000	13,500	13,500	8,500	9,200	10,100	10,600
MAINE	8,800	9,000	10,200	8,700	11,300	13,000	8,000	8,000	8,600	------
MARYLAND	11,700	11,000	11,000	11,000	15,000	15,500	9,000	10,200	10,400	12,000
MASSACHUSETTS	11,000	11,000	10,500	11,600	15,500	16,000	8,900	10,000	11,000	12,000
MICHIGAN	10,800	11,000	11,400	10,800	14,000	15,000	9,000	9,600	10,100	11,300
MINNESOTA	10,500	10,300	10,600	10,200	13,500	14,400	8,900	9,300	10,500	13,000
MISSISSIPPI	9,300	9,600	9,800	9,300	11,000	12,500	7,900	8,400	10,000	------
MISSOURI	10,300	10,600	11,000	10,700	14,000	14,500	8,900	9,200	10,300	10,000
MONTANA	9,000	9,100	9,000	9,800	9,300	10,200	8,200	8,300	9,700	------
NEBRASKA	9,400	10,000	10,000	10,000	11,700	12,000	8,300	7,800	9,500	------
NEVADA	9,800	9,800	------	9,800	11,400	12,000	8,400	------	10,000	------
NEW HAMPSHIRE	9,500	10,000	10,100	9,200	12,700	13,200	8,700	------	8,200	------
NEW JERSEY	12,000	11,500	12,000	11,700	15,900	16,200	8,500	10,000	10,300	11,900
NEW MEXICO	11,900	13,000	13,500	12,300	13,500	15,500	8,800	10,000	10,000	------
NEW YORK	11,800	11,500	11,500	11,700	16,000	16,700	9,300	10,200	11,000	11,500
NORTH CAROLINA	10,000	10,300	10,000	10,500	13,000	15,000	9,000	9,500	9,000	12,000
NORTH DAKOTA	8,700	9,500	10,200	9,000	10,000	------	8,100	------	8,100	------
OHIO	10,600	10,500	11,400	10,300	14,000	14,500	8,900	9,600	10,000	12,000
OKLAHOMA	10,800	11,000	11,500	11,000	14,400	15,000	8,500	10,000	10,200	10,000
OREGON	9,200	9,500	9,500	10,000	9,500	12,500	8,700	8,000	9,500	10,800
PENNSYLVANIA	11,000	11,000	11,000	11,000	15,000	15,900	8,500	9,600	10,300	11,500
RHODE ISLAND	10,000	9,300	9,000	9,300	15,000	15,000	8,900	10,000	10,000	10,400
SOUTH CAROLINA	9,900	10,000	10,000	10,000	12,500	14,000	8,300	9,700	9,500	------
SOUTH DAKOTA	8,600	9,000	9,500	8,500	9,400	11,400	8,000	------	8,500	------
TENNESSEE	10,800	11,400	12,000	11,000	14,000	14,800	8,300	10,000	10,000	11,000
TEXAS	10,300	10,300	10,600	10,500	14,200	15,000	8,600	9,400	10,000	10,500
UTAH	10,000	10,000	10,000	10,000	11,700	13,000	8,800	9,300	9,600	10,000
VERMONT	8,600	8,600	8,900	------	11,000	------	8,300	------	------	------
VIRGINIA	10,600	10,600	10,100	11,200	14,100	15,000	8,400	9,800	10,300	10,500
WASHINGTON	10,000	10,500	10,400	10,500	12,000	15,000	8,400	9,000	10,000	10,300
WEST VIRGINIA	10,000	10,300	11,300	10,900	14,000	15,000	8,100	9,200	9,400	------
WISCONSIN	9,800	9,700	10,000	9,600	12,600	14,300	8,800	9,000	10,000	10,900
WYOMING	9,500	9,300	9,000	9,600	10,400	10,400	8,000	9,000	10,000	------
PUERTO RICO	9,500	8,400	10,200	7,200	12,000	12,500	7,000	7,500	10,300	------
FOREIGN	11,300	8,200	7,200	11,000	15,200	15,000	8,000	12,000	12,000	12,000

(A)INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH OR DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

NOTE—TEACHING SALARIES REFLECT A COMPOSITE OF ACADEMIC AND CALENDAR YEAR SALARIES FOR SECONDARY SCHOOLS AND INSTITUTIONS OF HIGHER EDUCATION. NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-25.—NUMBER OF SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND FIELD, 1964

LOCATION	TOTAL	SCIENTIFIC AND TECHNICAL FIELD					
		CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES
ALL LOCATIONS	223,854	63,053	17,907	5,510	26,698	17,411	9,526
STANDARD METROPOLITAN STATISTICAL AREAS	166,753	48,645	12,826	3,807	21,252	13,849	3,537
ABILENE, TEX	156	18	87	10	5	4	3
AKRON, OHIO	983	626	18	------	45	39	5
ALBANY, GA	32	3	5	9	1	1	2
ALBANY-SCHENECTADY-TROY, N.Y	1,407	475	38	13	335	97	19
ALBUQUERQUE, N.MEX	655	88	79	28	171	82	47
ALLENTOWN-BETHLEHEM-EASTON, PA.-N.J	587	249	29	1	101	26	3
ALTOONA, PA	16	10	1	------	------	------	------
AMARILLO, TEX	317	32	189	17	12	9	9
ANAHEIM-SANTA ANA-GARDEN GROVE, CALIF	1,160	302	96	4	224	180	13
ANN ARBOR, MICH	1,547	261	81	35	236	153	29
ASHEVILLE, N.C	142	35	5	36	3	7	15
ATLANTA, GA	1,053	263	28	35	106	91	51
ATLANTIC CITY, N.J	60	7	------	9	4	13	1
AUGUSTA, GA.-S.C	304	131	7	4	43	4	9
AUSTIN, TEX	827	168	113	11	157	55	5
BAKERSFIELD, CALIF	332	51	159	10	13	10	11
BALTIMORE, MD	1,879	539	53	14	297	165	12
BATON ROUGE, LA	665	250	51	3	40	26	48
BAY CITY, MICH	70	22	------	------	3	3	------
BEAUMONT-PORT ARTHUR, TEX	412	224	41	2	13	15	3
BILLINGS, MONT	113	3	81	2	2	3	7
BINGHAMTON, N.Y.-PA	349	129	10	2	46	57	1
BIRMINGHAM, ALA	275	99	5	1	12	16	7
BOISE CITY, IDAHO	------	------	------	------	------	------	------
BOSTON, MASS	7,230	1,810	228	226	1,708	719	28
BRIDGEPORT, CONN	201	84	------	2	12	8	2
BROCKTON, MASS	44	12	3	------	4	2	------
BROWNSVILLE-HARLINGEN-SAN BENITO, TEX	34	6	1	4	3	------	2
BUFFALO, N.Y	1,599	776	28	10	150	93	4
CANTON, OHIO	104	39	3	------	7	3	1
CEDAR RAPIDS, IOWA	102	22	6	------	20	14	2
CHAMPAIGN-URBANA, ILL	1,495	296	125	28	276	135	74
CHARLESTON, S.C	157	48	2	17	6	12	13
CHARLESTON, W.VA	565	405	14	3	4	11	8
CHARLOTTE, N.C	224	111	------	8	8	18	2
CHATTANOOGA, TENN.-GA	169	90	6	1	7	23	4
CHICAGO, ILL	7,615	2,831	198	127	828	494	39
CINCINNATI, OHIO-KY.-IND	1,528	710	53	44	78	87	10
CLEVELAND, OHIO	2,550	1,091	37	20	411	139	2
COLORADO SPRINGS, COLO	167	15	10	15	30	37	6
COLUMBIA, S.C	184	54	11	4	19	16	15
COLUMBUS, GA.-ALA	47	7	3	4	2	7	4
COLUMBUS, OHIO	1,760	470	142	14	214	130	80
CORPUS CHRISTI, TEX	432	121	253	7	4	6	------
DALLAS, TEX	1,399	249	364	21	182	129	14
DAVENPORT-ROCK ISLAND-MOLINE, IOWA-ILL	124	46	8	3	11	9	2
DAYTON, OHIO	997	373	14	14	193	94	3
DECATUR, ILL	117	69	------	------	6	4	1
DENVER, COLO	2,609	415	834	105	340	135	72
DES MOINES, IOWA	171	33	2	6	7	42	4
DETROIT, MICH	2,256	813	48	29	232	197	16
DUBUQUE, IOWA	51	12	------	1	6	5	1
DULUTH-SUPERIOR, MINN.-WIS	162	29	20	4	11	12	23
DURHAM, N.C	648	241	11	2	91	36	13
EL PASO, TEX	149	31	21	18	14	11	1
ERIE, PA	127	63	5	------	13	6	3
EUGENE, OREG	338	53	27	2	38	31	44
EVANSVILLE, IND.-KY	208	81	43	3	8	2	1
FALL RIVER, MASS.-R.I	30	17	------	------	4	------	1
FARGO-MOORHEAD, N. DAK.-MINN	174	45	4	2	11	12	25
FITCHBURG-LEOMINSTER, MASS	31	16	1	1	2	2	------
FLINT, MICH	171	23	3	2	14	16	------
FORT LAUDERDALE-HOLLYWOOD, FLA	117	11	5	------	4	4	8
FORT SMITH, ARK.-OKLA	75	3	8	------	1	2	------
FORT WAYNE, IND	18	38	2	2	25	52	------
FORT WORTH, TEX	178	58	93	22	66	63	6
FRESNO, CALIF	442	26	17	4	10	5	44
GADSDEN, ALA	208	1	------	------	------	------	1
GALVESTON-TEXAS CITY, TEX	3	119	5	3	4	4	4
GARY-HAMMOND-EAST CHICAGO, IND	244	242	5	------	19	25	1
GRAND RAPIDS, MICH	426	68	8	5	14	7	2
GREAT FALLS, MONT	178	4	2	21	------	6	7
GREEN BAY, WIS	56	17	------	1	5	8	------
GREENSBORO-HIGH POINT, N.C	54	63	4	3	6	16	4
GREENVILLE, S.C	165	31	------	1	4	5	------
HAMILTON-MIDDLETOWN, OHIO	66	32	22	2	11	14	------
HARRISBURG, PA	157	38	29	10	14	17	25
HARTFORD, CONN	220	114	16	66	99	175	13
HONOLULU, HAWAII	747	82	55	37	27	38	44
HOUSTON, TEX	590	671	944	19	164	148	17
HUNTINGTON-ASHLAND, W.VA.-KY.-OHIO	2,642	87	15	1	4	7	2
HUNTSVILLE, ALA	161	105	2	18	143	110	5
INDIANAPOLIS, IND	500	391	13	5	44	55	18
JACKSON, MICH	905	6	5	------	3	2	5
JACKSON, MISS	41	20	178	2	9	5	20
JACKSONVILLE, FLA	314	36	8	15	5	14	13
JERSEY CITY, N.J	147	299	2	1	55	19	1

TABLE A-25.—NUMBER OF SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND FIELD, 1964—CONTINUED

LOCATION	SCIENTIFIC AND TECHNICAL FIELD						
	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELDS
ALL LOCATICNS	27,135	16,804	2,843	12,143	2,703	1,351	20,770
STANDARD METROPOLITAN STATISTICAL AREAS	19,359	13,041	2,257	9,490	1,979	1,000	15,711
ABILENE, TEX	5	12	------	1	2	------	9
AKRON, OHIO	32	43	8	54	7	3	103
ALBANY, GA	6	------	------	2	------	------	3
ALBANY-SCHENECTADY-TROY, N.Y	151	64	21	46	10	1	137
ALBUQUERQUE, N.MEX	50	33	13	11	2	3	48
ALLENTOWN-BETHLEHEM-EASTON, PA.-N.J	23	36	6	37	4	1	71
ALTOONA, PA	2	2	------	------	------	------	1
AMARILLO, TEX	15	8	------	6	1	------	19
ANAHEIM-SANTA ANA-GARDEN GROVE, CALIF	46	73	14	36	6	6	160
ANN ARBOR, MICH	294	173	26	70	42	47	100
ASHEVILLE, N.C	15	6	------	5	2	------	13
ATLANTA, GA	203	99	22	71	15	2	67
ATLANTIC CITY, N.J	------	13	2	------	------	------	11
AUGUSTA, GA.-S.C	42	14	------	5	------	------	45
AUSTIN, TEX	100	64	10	38	21	30	55
BAKERSFIELD, CALIF	20	10	------	7	------	------	41
BALTIMORE, MD	364	120	31	59	23	3	199
BATON ROUGE, LA	103	21	2	42	9	3	67
BAY CITY, MICH	9	16	1	3	7	------	6
BEAUMONT-PORT ARTHUR, TEX	12	2	3	10	3	------	84
BILLINGS, MONT	2	2	------	2	------	------	9
BINGHAMTON, N.Y.-PA	13	30	7	14	4	1	35
BIRMINGHAM, ALA	85	10	3	12	2	------	23
BOISE CITY, IDAHO	------	------	------	------	------	------	------
BOSTON, MASS	821	549	76	357	100	55	553
BRIDGEPORT, CONN	15	20	2	16	2	------	38
BROCKTON, MASS	5	13	------	1	1	------	3
BROWNSVILLE-HARLINGEN-SAN BENITO, TEX	14	2	------	------	------	------	2
BUFFALO, N.Y	187	97	20	50	26	7	151
CANTON, OHIO	14	11	1	5	2	------	18
CEDAR RAPIDS, IOWA	7	10	1	5	5	4	6
CHAMPAIGN-URBANA, ILL	214	86	19	129	21	24	68
CHARLESTON, S.C	32	5	------	4	------	2	16
CHARLESTON, W.VA	14	6	4	10	2	1	83
CHARLOTTE, N.C	13	20	3	17	4	1	19
CHATTANOOGA, TENN.-GA	5	10	1	2	------	------	20
CHICAGO, ILL	989	647	100	526	96	48	692
CINCINNATI, OHIC-KY.-IND	193	92	20	64	9	1	167
CLEVELAND, OHIO	233	164	25	152	24	8	244
COLORADO SPRINGS, COLO	10	10	3	11	4	2	14
COLUMBIA, S.C	16	21	------	13	1	------	14
COLUMBUS, GA.-ALA	4	11	1	------	1	------	3
COLUMBUS, OHIO	204	136	26	113	30	15	186
CORPUS CHRISTI, TEX	8	6	------	2	------	------	25
DALLAS, TEX	104	77	29	56	9	3	162
DAVENPORT-ROCK ISLAND-MOLINE, IOWA-ILL	17	4	3	5	1	------	15
DAYTON, OHIO	52	85	22	19	8	2	118
DECATUR, ILL	14	4	1	8	1	------	9
DENVER, COLO	206	174	22	60	17	8	221
DES MOINES, IOWA	24	30	3	15	1	------	4
DETROIT, MICH	208	240	24	154	26	7	262
DUBUQUE, IOWA	8	8	------	4	2	------	4
DULUTH-SUPERIOR, MINN.-WIS	22	16	------	8	2	1	14
DURHAM, N.C	143	40	13	27	8	4	19
EL PASO, TEX	12	14	1	3	2	1	20
ERIE, PA	12	7	------	4	1	2	11
EUGENE, OREG	28	54	3	27	14	2	15
EVANSVILLE, IND.-KY	34	14	2	5	------	------	15
FALL RIVER, MASS.-R.I	1	2	------	1	------	------	4
FARGO-MOORHEAD, N.DAK.-MINN	37	11	1	20	2	------	4
FITCHBURG-LEOMINSTER, MASS	2	2	1	------	1	------	3
FLINT, MICH	12	14	2	7	1	1	22
FORT LAUDERDALE-HOLLYWOOD, FLA	14	16	1	4	2	------	6
FORT SMITH, ARK.-OKLA	1	1	------	1	------	------	1
FORT WAYNE, IND	11	20	------	2	3	------	23
FORT WORTH, TEX	31	33	3	16	3	3	45
FRESNO, CALIF	53	22	------	16	1	3	7
GADSDEN, ALA	------	------	------	1	------	------	------
GALVESTON-TEXAS CITY, TEX	47	5	1	7	------	------	45
GARY-HAMMOND-EAST CHICAGO, IND	19	16	2	10	2	4	81
GRAND RAPIDS, MICH	23	19	1	12	2	2	15
GREAT FALLS, MONT	5	1	------	1	1	------	8
GREEN BAY, WIS	9	3	1	1	------	------	9
GREENSBORO-HIGH POINT, N.C	21	14	2	12	8	------	12
GREENVILLE, S.C	6	7	------	2	3	------	7
HAMILTON-MIDDLETOWN, OHIO	23	24	1	9	4	1	14
HARRISBURG, PA	17	23	14	9	1	1	22
HARTFORD, CONN	34	64	10	54	6	8	88
HONOLULU, HAWA	136	43	7	43	11	24	43
HOUSTON, TEX	141	85	15	107	8	7	316
HUNTINGTON-ASHLAND, W.VA.-KY.-OHIO	10	9	------	5	3	------	18
HUNTSVILLE, ALA	3	5	7	3	1	------	98
INDIANAPOLIS, IND	207	65	10	25	9	1	62
JACKSON, MICH	3	4	------	1	1	------	11
JACKSON, MISS	46	18	4	2	------	------	10
JACKSONVILLE, FLA	23	14	3	4	1	------	11
JERSEY CITY, N.J	57	28	5	19	2	2	58

TABLE A-25.—NUMBER OF SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND FIELD, 1964—CONTINUED

LOCATION	TOTAL	SCIENTIFIC AND TECHNICAL FIELD					
		CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES
STANDARD METROPOLITAN STATISTICAL AREAS-CONTINUED							
JOHNSTOWN, PA	42	7	4	——	8	2	1
KALAMAZOO, MICH	405	211	11	——	14	9	2
KANSAS CITY, MO.-KANS	775	316	17	66	38	44	9
KENOSHA, WIS	11	4	1	——	2	1	——
KNOXVILLE, TENN	1,345	449	57	9	303	59	57
LAFAYETTE, LA	277	7	231	——	2	4	3
LAKE CHARLES, LA	136	74	10	2	3	10	4
LANCASTER, PA	310	151	10	1	54	12	2
LANSING, MICH	995	156	65	3	80	50	99
LAREDO, TEX	12	2	1	3	2	——	——
LAS VEGAS, NEV	147	37	20	23	20	6	5
LAWRENCE-HAVERHILL, MASS.-N.H	86	26	2	1	10	6	——
LAWTON, OKLA	25	1	1	7	3	4	——
LEWISTON-AUBURN, MAINE	14	3	——	——	1	2	——
LEXINGTON, KY	449	76	31	2	35	24	40
LIMA, OHIO	34	16	1	——	2	3	——
LINCOLN, NEBR	514	81	40	9	44	42	62
LITTLE ROCK-NORTH LITTLE ROCK, ARK	194	43	19	9	6	4	20
LORAIN-ELYRIA, OHIO	140	82	4	——	6	7	1
LOS ANGELES-LONG BEACH, CALIF	9,390	1,756	657	172	1,686	1,523	42
LOUISVILLE, KY.-IND	524	254	11	9	23	24	4
LOWELL, MASS	110	59	——	1	15	4	——
LUBBOCK, TEX	215	49	44	6	11	13	24
LYNCHBURG, VA	91	23	——	2	29	6	2
MACON, GA	54	13	3	9	1	3	12
MADISON, WIS	1,754	455	106	47	207	142	112
MANCHESTER, N.H	19	5	1	——	2	1	2
MAYAGUEZ, P.R	62	17	2	1	8	4	2
MEMPHIS, TENN.-ARK	382	147	11	16	10	16	6
MERIDEN, CONN	6	2	——	——	——	——	——
MIAMI, FLA	545	80	57	65	27	21	14
MIDLAND, TEX	608	3	564	2	——	1	——
MILWAUKEE, WIS	878	268	29	2	60	95	32
MINNEAPOLIS-ST. PAUL, MINN	2,898	924	106	39	278	262	154
MOBILE, ALA	107	38	6	8	8	5	13
MONROE, LA	77	19	12	——	4	8	12
MONTGOMERY, ALA	89	10	2	20	1	10	11
MUNCIE, IND	91	14	8	——	8	8	2
MUSKEGON-MUSKEGON HEIGHTS, MICH	59	29	2	1	6	2	2
NASHVILLE, TENN	478	115	21	6	59	45	23
NEW BEDFORD, MASS	18	9	——	2	1	1	——
NEW BRITAIN, CONN	39	6	1	——	2	5	1
NEW HAVEN, CONN	1,190	389	50	5	192	58	14
NEW LONDON-GROTON-NORWICH, CONN	281	88	8	2	61	17	1
NEW ORLEANS, LA	1,278	265	475	24	78	56	10
NEW YORK, N.Y	14,870	3,689	416	280	1,627	1,424	63
NEWARK, N.J	4,462	2,340	34	11	562	273	3
NEWPORT NEWS-HAMPTON, VA	225	25	1	43	87	16	1
NORFOLK-PORTSMOUTH, VA	209	44	10	26	25	29	10
NORWALK, CONN	202	82	3	——	55	4	——
ODESSA, TEX	49	27	7	——	1	2	——
OGDEN, UTAH	89	9	4	3	5	7	30
OKLAHOMA CITY, OKLA	939	106	413	51	45	57	8
OMAHA, NEBR.-IOWA	371	55	18	84	16	54	5
ORLANDO, FLA	290	75	12	4	50	31	11
PATERSON-CLIFTON-PASSAIC, N.J	1,242	669	13	2	85	110	2
PENSACOLA, FLA	103	48	3	3	5	2	7
PEORIA, ILL	263	165	6	1	8	11	2
PHILADELPHIA, PA.-N.J	6,197	2,565	60	43	588	467	60
PHOENIX, ARIZ	687	121	35	20	76	102	57
PITTSBURGH, PA	2,932	1,154	155	10	478	164	11
PITTSFIELD, MASS	94	49	——	——	14	10	——
PONCE, P.R	19	9	1	——	1	1	1
PORTLAND, MAINE	69	26	4	3	3	8	2
PORTLAND, OREG.-WASH	732	124	43	19	43	36	121
PROVIDENCE-PAWTUCKET-WARWICK, R.I.-MASS	676	201	37	4	128	57	5
PROVO-OREM, UTAH	196	41	17	2	22	18	13
PUEBLO, COLO	53	7	4	2	5	3	4
RACINE, WIS	120	78	——	——	3	4	2
RALEIGH, N.C	601	86	17	6	42	50	104
READING, PA	133	75	5	2	11	——	——
RENO, NEV	180	33	30	8	17	10	20
RICHMOND, VA	541	238	3	2	18	25	13
ROANOKE, VA	46	8	3	2	4	3	3
ROCHESTER, N.Y	1,752	725	22	3	377	77	6
ROCKFORD, ILL	51	20	1	1	1	8	——
SACRAMENTO, CALIF	1,396	349	133	37	58	72	158
SAGINAW, MICH	22	4	1	——	3	1	2
ST. JOSEPH, MO	20	6	——	1	1	1	1
ST. LOUIS, MO.-ILL	2,252	829	97	116	180	138	18
SALT LAKE CITY, UTAH	796	136	177	39	63	50	31
SAN ANGELO, TEX	32	——	11	5	1	1	6
SAN ANTONIO, TEX	543	103	110	25	44	41	7
SAN BERNARDINO-RIVERSIDE-ONTARIO, CALIF	842	186	46	48	105	70	52
SAN DIEGO, CALIF	1,471	227	146	21	383	169	16
SAN FRANCISCO-OAKLAND, CALIF	6,342	1,827	431	169	992	483	114
SAN JOSE, CALIF	2,761	470	122	49	667	429	14
SAN JUAN, P.R	215	49	13	14	9	7	7
SANTA BARBARA, CALIF	437	51	39	22	109	57	10

TABLE A-25.—NUMBER OF SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND FIELD, 1964—CONTINUED

LOCATION	SCIENTIFIC AND TECHNICAL FIELD						
	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELDS
STANDARD METROPOLITAN STATISTICAL AREAS-CONTINUED							
JOHNSTOWN, PA	4	3	------	4	------	------	9
KALAMAZOO, MICH	68	22	5	24	13	5	21
KANSAS CITY, MO.-KANS	100	48	7	51	9	2	68
KENOSHA, WIS	1	------	------	1	------	------	1
KNOXVILLE, TENN	193	44	14	36	5	1	118
LAFAYETTE, LA	9	5	2	2	------	------	12
LAKE CHARLES, LA	5	1	------	7	1	------	19
LANCASTER, PA	19	14	1	9	3	------	34
LANSING, MICH	210	106	15	120	32	16	43
LAREDO, TEX	2	------	------	------	------	------	2
LAS VEGAS, NEV	9	9	------	2	------	------	16
LAWRENCE-HAVERHILL, MASS.-N.H	6	7	3	1	1	------	23
LAWTON, OKLA	2	3	------	------	------	------	4
LEWISTON-AUBURN, MAINE	2	4	------	2	------	------	------
LEXINGTON, KY	114	47	4	36	24	2	14
LIMA, OHIO	2	1	------	1	1	------	7
LINCOLN, NEBR	104	44	5	53	5	3	22
LITTLE ROCK-NORTH LITTLE ROCK, ARK	45	25	2	10	------	------	11
LORAIN-ELYRIA, OHIO	9	9	2	6	4	------	10
LOS ANGELES-LONG BEACH, CALIF	794	952	109	454	83	58	1,104
LOUISVILLE, KY.-IND	74	33	5	16	7	2	62
LOWELL, MASS	9	2	1	3	------	------	16
LUBBOCK, TEX	26	10	1	15	4	2	10
LYNCHBURG, VA	10	5	------	4	4	------	6
MACON, GA	4	1	1	2	1	1	3
MADISON, WIS	315	124	19	109	28	22	68
MANCHESTER, N.H	3	------	------	3	------	------	2
MAYAGUEZ, P.R	20	1	------	3	1	2	1
MEMPHIS, TENN.-ARK	100	33	------	14	3	2	24
MERIDEN, CONN	------	3	------	------	------	------	1
MIAMI, FLA	138	80	1	23	3	2	32
MIDLAND, TEX	3	1	------	3	------	------	31
MILWAUKEE, WIS	124	88	11	51	18	2	98
MINNEAPOLIS-ST. PAUL, MINN	410	263	50	158	30	10	214
MOBILE, ALA	8	4	1	3	2	------	11
MONROE, LA	9	------	1	4	1	------	7
MONTGOMERY, ALA	12	13	------	1	3	3	3
MUNCIE, IND	19	13	1	5	3	1	9
MUSKEGON-MUSKEGON HEIGHTS, MICH	3	6	1	1	------	------	6
NASHVILLE, TENN	93	53	4	17	7	3	32
NEW BEDFORD, MASS	------	------	------	2	------	1	2
NEW BRITAIN, CONN	5	8	------	2	1	------	8
NEW HAVEN, CONN	220	86	7	64	26	21	58
NEW LONDON-GROTON-NORWICH, CONN	34	32	2	2	2	------	32
NEW ORLEANS, LA	186	49	9	36	9	5	76
NEW YORK, N.Y	1,901	2,027	260	1,417	247	104	1,415
NEWARK, N.J	274	225	40	173	16	2	509
NEWPORT NEWS-HAMPTON, VA	10	13	1	5	------	------	23
NORFOLK-PORTSMOUTH, VA	21	14	3	4	2	1	20
NORWALK, CONN	5	16	------	6	1	------	30
ODESSA, TEX	2	------	------	3	------	------	7
OGDEN, UTAH	11	7	1	5	1	------	6
OKLAHOMA CITY, OKLA	120	43	2	22	6	1	65
OMAHA, NEBR.-IOWA	57	31	2	20	7	------	22
ORLANDO, FLA	32	12	3	13	1	------	46
PATERSON-CLIFTON-PASSAIC, N.J	50	90	20	67	5	5	124
PENSACOLA, FLA	11	3	------	1	------	------	20
PEORIA, ILL	16	18	1	14	2	------	19
PHILADELPHIA, PA.-N.J	871	439	47	324	54	38	641
PHOENIX, ARIZ	69	81	10	44	7	3	62
PITTSBURGH, PA	210	202	46	138	30	7	327
PITTSFIELD, MASS	2	2	1	3	1	------	12
PONCE, P.R	------	------	------	1	------	------	5
PORTLAND, MAINE	9	4	1	2	1	------	6
PORTLAND, OREG.-WASH	132	83	4	43	14	4	56
PROVIDENCE-PAWTUCKET-WARWICK, R.I.-MASS	62	56	2	37	13	11	63
PROVO-OREM, UTAH	24	19	3	9	10	3	15
PUEBLO, COLO	7	12	3	2	------	------	4
RACINE, WIS	9	6	------	4	------	------	14
RALEIGH, N.C	162	30	16	49	15	------	24
READING, PA	9	6	2	5	1	------	17
RENO, NEV	19	12	------	16	2	2	11
RICHMOND, VA	100	36	8	33	6	2	57
ROANOKE, VA	6	9	2	1	1	------	4
ROCHESTER, N.Y	167	92	32	58	8	8	177
ROCKFORD, ILL	6	6	------	2	1	------	5
SACRAMENTO, CALIF	293	72	22	81	13	6	102
SAGINAW, MICH	4	2	------	1	------	------	4
ST. JOSEPH, MO	7	1	------	------	------	------	2
ST. LOUIS, MO.-ILL	247	146	21	146	36	3	275
SALT LAKE CITY, UTAH	119	67	12	17	7	7	71
SAN ANGELO, TEX	------	3	------	------	------	------	5
SAN ANTONIO, TEX	85	71	6	12	3	2	34
SAN BERNARDINO-RIVERSIDE-ONTARIO, CALIF	181	55	5	16	7	1	70
SAN DIEGO, CALIF	131	142	13	47	16	5	155
SAN FRANCISCO-OAKLAND, CALIF	802	435	65	334	82	51	557
SAN JOSE, CALIF	209	238	54	118	27	16	348
SAN JUAN, P.R	42	16	4	17	4	12	21
SANTA BARBARA, CALIF	33	52	2	15	5	4	38

TABLE A-25.—NUMBER OF SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND FIELD, 1964—CONTINUED

LOCATION	TOTAL	SCIENTIFIC AND TECHNICAL FIELD					
		CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES
STANDARD METROPOLITAN STATISTICAL AREAS-CONTINUED							
SAVANNAH, GA	118	36	3	8	------	8	14
SCRANTON, PA	67	21	1	------	7	3	2
SEATTLE-EVERETT, WASH	1,708	331	111	57	285	189	86
SHREVEPORT, LA	259	27	147	19	5	16	3
SIOUX CITY, IOWA-NEBR	34	6	2	6	2	1	2
SIOUX FALLS, S.DAK	45	8	1	6	4	5	1
SOUTH BEND, IND	312	114	8	3	55	34	1
SPOKANE, WASH	134	27	16	8	8	9	11
SPRINGFIELD, ILL	66	8	4	1	6	9	9
SPRINGFIELD, MO	80	21	4	1	3	10	7
SPRINGFIELD, OHIO	35	4	4	------	3	5	1
SPRINGFIELD-CHICOPEE-HOLYOKE, MASS.-CONN	386	164	6	1	24	48	5
STAMFORD, CONN	476	284	6	------	64	21	------
STEUBENVILLE-WEIRTON, OHIO-W.VA	31	13	------	------	3	3	------
STOCKTON, CALIF	104	24	8	3	9	4	7
SYRACUSE, N.Y	1,000	277	49	8	154	100	22
TACOMA, WASH	220	47	16	21	8	11	25
TAMPA-ST. PETERSBURG, FLA	315	47	8	19	36	36	2
TERRE HAUTE, IND	189	66	13	------	10	13	4
TEXARKANA, TEX.-ARK	8	1	2	------	2	1	2
TOLEDO, OHIO-MICH	421	173	18	3	41	25	3
TOPEKA, KANS	156	19	13	10	6	10	4
TRENTON, N.J	1,515	458	55	5	400	148	13
TUCSON, ARIZ	721	115	115	31	92	39	44
TULSA, OKLA	719	118	367	4	29	39	5
TUSCALOOSA, ALA	156	34	21	1	16	10	6
TYLER, TEX	134	6	115	------	------	1	1
UTICA-ROME, N.Y	140	25	5	5	36	14	2
VALLEJO-NAPA, CALIF	102	23	5	16	10	1	3
WACO, TEX	125	39	10	15	8	5	2
WASHINGTON, D.C.-MD.-VA	11,788	1,787	896	540	1,696	1,109	350
WATERBURY, CONN	186	124	------	------	6	5	------
WATERLOO, IOWA	42	7	1	------	4	5	------
WEST PALM BEACH, FLA	85	16	------	1	10	7	15
WHEELING, W.VA.-OHIO	32	14	1	------	4	4	------
WICHITA, KANS	401	62	191	10	16	28	2
WICHITA FALLS, TEX	10	1	4	3	1	------	------
WILKES-BARRE-HAZLETON, PA	86	28	2	2	13	8	1
WILMINGTON, DEL.-N.J.-MD	2,594	1,757	17	4	110	40	11
WINSTON-SALEM, N.C	195	79	------	3	11	19	3
WORCESTER, MASS	341	105	25	2	34	35	3
YORK, PA	94	30	3	2	10	6	5
YOUNGSTOWN-WARREN, OHIO	106	35	7	3	5	8	------
OTHER LOCATIONS	57,101	14,408	5,081	1,703	5,446	3,562	5,989

TABLE A-25.—NUMBER OF SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND FIELD, 1964—CONTINUED

LOCATION	SCIENTIFIC AND TECHNICAL FIELD						
	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELDS
STANDARD METROPOLITAN STATISTICAL AREAS-CONTINUED							
SAVANNAH, GA	23	6	------	5	------	------	15
SCRANTON, PA	6	10	1	2	6	------	8
SEATTLE-EVERETT, WASH	255	119	20	75	17	17	146
SHREVEPORT, LA	5	9	------	5	1	------	22
SIOUX CITY, IOWA-NEBR	7	4	------	------	2	------	2
SIOUX FALLS, S.DAK	7	8	------	1	1	------	3
SOUTH BEND, IND	29	11	------	30	8	1	19
SPOKANE, WASH	14	12	2	9	2	1	15
SPRINGFIELD, ILL	9	10	3	2	2	------	3
SPRINGFIELD, MO	11	5	------	10	5	------	3
SPRINGFIELD, OHIO	4	5	1	1	4	------	3
SPRINGFIELD-CHICOPEE-HOLYOKE, MASS.-CONN	25	34	4	15	3	2	55
STAMFORD, CONN	9	22	4	7	1	1	57
STEUBENVILLE-WEIRTON, OHIO-W.VA	4	------	------	2	------	------	6
STOCKTON, CALIF	18	19	1	2	2	1	6
SYRACUSE, N.Y	124	86	11	58	15	8	88
TACOMA, WASH	24	35	3	12	3	------	15
TAMPA-ST. PETERSBURG, FLA	41	61	4	14	8	1	38
TERRE HAUTE, IND	33	12	1	11	5	------	21
TEXARKANA, TEX.-ARK	------	------	------	------	------	------	------
TOLEDO, OHIO-MICH	27	37	6	22	10	------	56
TOPEKA, KANS	20	46	3	7	3	1	14
TRENTON, N.J	87	125	16	51	16	13	128
TUCSON, ARIZ	121	43	6	48	13	4	50
TULSA, OKLA	13	25	6	24	2	------	87
TUSCALOOSA, ALA	11	24	3	16	7	2	5
TYLER, TEX	1	2	------	1	------	------	7
UTICA-ROME, N.Y	11	13	3	3	------	------	23
VALLEJO-NAPA, CALIF	14	18	1	1	------	------	10
WACO, TEX	10	20	2	3	2	------	9
WASHINGTON, D.C.-MD.-VA	1,632	771	442	1,357	179	122	907
WATERBURY, CONN	7	6	1	9	------	------	28
WATERLOO, IOWA	9	5	1	1	1	------	8
WEST PALM BEACH, FLA	15	7	3	------	------	------	11
WHEELING, W.VA.-OHIO	3	------	------	3	1	------	2
WICHITA, KANS	22	29	2	11	3	------	25
WICHITA FALLS, TEX	------	------	1	------	------	------	------
WILKES-BARRE-HAZLETON, PA	5	16	------	5	------	------	6
WILMINGTON, DEL.-N.J.-MD	85	60	22	151	5	2	330
WINSTON-SALEM, N.C	44	15	3	1	2	------	15
WORCESTER, MASS	41	35	1	21	5	2	32
YORK, PA	7	13	1	5	1	------	11
YOUNGSTOWN-WARREN, OHIO	11	15	------	5	------	3	14
OTHER LOCATIONS	7,776	3,763	586	2,653	724	351	5,059

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-26.—NUMBER OF SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND HIGHEST DEGREE, 1964

LOCATION	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ALL LOCATIONS	223,854	79,372	5,925	61,222	72,364	2,878	2,093
STANDARD METROPOLITAN STATISTICAL AREAS	166,753	60,255	5,197	44,608	53,030	2,041	1,622
ABILENE, TEX	156	25	------	52	73	6	------
AKRON, OHIO	983	284	4	220	459	5	11
ALBANY, GA	32	3	------	8	18	3	------
ALBANY-SCHENECTADY-TROY, N.Y	1,407	675	37	319	360	11	5
ALBUQUERQUE, N.MEX	655	261	13	199	167	12	3
ALLENTOWN-BETHLEHEM-EASTON, PA.-N.J	587	218	2	177	182	5	3
ALTOONA, PA	16	3	------	5	8	------	------
AMARILLO, TEX	317	31	4	86	179	10	7
ANAHEIM-SANTA ANA-GARDEN GROVE, CALIF	1,160	323	7	336	447	27	20
ANN ARBOR, MICH	1,547	782	66	504	181	4	10
ASHEVILLE, N.C	142	32	------	35	57	13	5
ATLANTA, GA	1,053	398	51	272	310	16	6
ATLANTIC CITY, N.J	60	9	------	22	24	4	1
AUGUSTA, GA.-S.C	304	93	20	69	120	------	2
AUSTIN, TEX	827	354	4	247	210	8	4
BAKERSFIELD, CALIF	332	26	2	112	182	6	4
BALTIMORE, MD	1,879	643	180	443	570	22	21
BATON ROUGE, LA	665	289	1	185	183	3	4
BAY CITY, MICH	70	33	------	23	11	1	2
BEAUMONT-PORT ARTHUR, TEX	412	66	1	86	254	2	3
BILLINGS, MONT	113	6	------	55	50	1	1
BINGHAMTON, N.Y.-PA	349	113	2	87	137	6	4
BIRMINGHAM, ALA	275	91	38	51	90	4	1
BOISE CITY, IDAHO	------	------	------	------	------	------	------
BOSTON, MASS	7,230	2,947	384	1,889	1,862	83	65
BRIDGEPORT, CONN	201	50	1	56	87	5	2
BROCKTON, MASS	44	19	------	14	10	1	------
BROWNSVILLE-HARLINGEN-SAN BENITO, TEX	34	8	------	11	14	1	------
BUFFALO, N.Y	1,599	581	62	364	545	28	19
CANTON, OHIO	104	24	------	31	47	1	1
CEDAR RAPIDS, IOWA	102	43	------	31	28	------	------
CHAMPAIGN-URBANA, ILL	1,495	809	11	458	203	8	6
CHARLESTON, S.C	157	52	9	35	51	6	4
CHARLESTON, W.VA	565	141	2	111	291	14	6
CHARLOTTE, N.C	224	61	4	52	99	6	2
CHATTANOOGA, TENN.-GA	169	42	2	38	80	3	4
CHICAGO, ILL	7,615	2,744	273	2,085	2,344	86	83
CINCINNATI, OHIO-KY.-IND	1,528	460	49	406	583	17	13
CLEVELAND, OHIO	2,550	773	116	690	925	22	24
COLORADO SPRINGS, COLO	167	53	------	63	43	4	4
COLUMBIA, S.C	184	81	3	33	64	1	2
COLUMBUS, GA.-ALA	47	9	------	16	22	------	------
COLUMBUS, OHIO	1,760	716	38	522	458	12	14
CORPUS CHRISTI, TEX	432	44	1	113	269	4	1
DALLAS, TEX	1,399	426	44	366	524	23	16
DAVENPORT-ROCK ISLAND-MOLINE, IOWA-ILL	124	20	1	43	56	------	4
DAYTON, OHIO	997	289	12	278	388	14	16
DECATUR, ILL	117	42	------	28	43	2	2
DENVER, COLO	2,609	812	51	730	967	28	21
DES MOINES, IOWA	171	51	2	65	49	3	1
DETROIT, MICH	2,256	693	48	726	725	36	28
DUBUQUE, IOWA	51	20	------	22	9	------	------
DULUTH-SUPERIOR, MINN.-WIS	162	56	1	41	60	3	1
DURHAM, N.C	648	370	57	109	108	------	4
EL PASO, TEX	149	32	2	44	57	10	4
ERIE, PA	127	31	------	43	50	2	1
EUGENE, OREG	338	164	------	77	97	------	------
EVANSVILLE, IND.-KY	208	68	2	48	84	3	3
FALL RIVER, MASS.-R.I	30	3	1	10	15	------	1
FARGO-MOORHEAD, N.DAK.-MINN	174	98	1	48	25	1	1
FITCHBURG-LEOMINSTER, MASS	31	8	------	10	12	------	1
FLINT, MICH	117	30	2	60	23	1	1
FORT LAUDERDALE-HOLLYWOOD, FLA	75	23	5	24	23	------	------
FORT SMITH, ARK.-OKLA	18	------	------	7	11	------	------
FORT WAYNE, IND	178	49	1	55	67	3	3
FORT WORTH, TEX	442	107	3	158	164	6	4
FRESNO, CALIF	208	90	------	54	61	3	------
GADSDEN, ALA	3	------	------	1	2	------	------
GALVESTON-TEXAS CITY, TEX	244	64	9	53	111	1	6
GARY-HAMMOND-EAST CHICAGO, IND	426	143	2	132	142	1	6
GRAND RAPIDS, MICH	178	49	2	61	62	3	1
GREAT FALLS, MONT	56	5	1	12	34	2	2
GREEN BAY, WIS	54	16	------	12	22	2	2
GREENSBORO-HIGH POINT, N.C	165	64	1	46	51	2	1
GREENVILLE, S.C	66	17	------	13	35	------	1
HAMILTON-MIDDLETOWN, OHIO	157	86	------	28	42	------	1
HARRISBURG, PA	220	49	5	78	83	4	1
HARTFORD, CONN	747	193	9	213	313	11	8
HONOLULU, HAWAII	590	260	6	156	157	10	1
HOUSTON, TEX	2,642	597	41	676	1,256	39	33
HUNTINGTON-ASHLAND, W.VA.-KY.-OHIO	161	35	1	30	88	3	4
HUNTSVILLE, ALA	500	88	------	146	251	9	6
INDIANAPOLIS, IND	905	304	49	249	288	8	7
JACKSON, MICH	41	5	------	18	18	------	------
JACKSON, MISS	314	47	24	95	140	6	2
JACKSONVILLE, FLA	147	28	2	45	67	5	------
JERSEY CITY, N.J	548	144	17	171	206	4	6
JOHNSTOWN, PA	42	13	------	17	12	------	------

TABLE A-26.—NUMBER OF SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND HIGHEST DEGREE, 1964—CONTINUED

LOCATION	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
STANDARD METROPOLITAN STATISTICAL AREAS - CONTINUED							
KALAMAZOO, MICH	405	233	8	79	82	1	2
KANSAS CITY, MO.-KANS	775	216	31	207	283	24	14
KENOSHA, WIS	11	4	—	2	4	1	—
KNOXVILLE, TENN	1,345	622	17	316	379	7	4
LAFAYETTE, LA	277	25	—	90	157	5	—
LAKE CHARLES, LA	136	17	—	29	89	1	—
LANCASTER, PA	310	97	4	79	126	1	3
LANSING, MICH	995	540	10	285	156	2	2
LAREDO, TEX	12	—	—	5	7	—	—
LAS VEGAS, NEV	147	18	—	51	74	3	1
LAWRENCE-HAVERHILL, MASS.-N.H	86	19	1	31	34	1	—
LAWTON, OKLA	25	3	—	8	9	3	2
LEWISTON-AUBURN, MAINE	14	8	—	4	2	—	—
LEXINGTON, KY	449	245	35	96	70	—	3
LIMA, OHIO	34	7	—	7	19	1	—
LINCOLN, NEBR	514	251	8	169	80	4	2
LITTLE ROCK-NORTH LITTLE ROCK, ARK	194	65	18	46	60	3	2
LORAIN-ELYRIA, OHIO	140	48	—	23	66	1	2
LOS ANGELES-LONG BEACH, CALIF	9,390	3,255	214	2,641	3,019	139	122
LOUISVILLE, KY.-IND	524	151	23	145	193	8	4
LOWELL, MASS	110	26	1	41	39	2	1
LUBBOCK, TEX	215	93	2	59	57	2	2
LYNCHBURG, VA	91	38	1	24	26	2	—
MACON, GA	54	8	—	16	25	2	3
MADISON, WIS	1,754	841	43	491	364	3	12
MANCHESTER, N.H	19	3	2	6	8	—	—
MAYAGUEZ, P.R	62	38	—	16	8	—	—
MEMPHIS, TENN.-ARK	382	158	30	75	111	3	5
MERIDEN, CONN	6	3	—	1	2	—	—
MIAMI, FLA	545	224	34	125	139	12	11
MIDLAND, TEX	608	18	—	174	399	11	6
MILWAUKEE, WIS	878	291	32	231	311	6	7
MINNEAPOLIS-ST. PAUL, MINN	2,898	1,135	75	693	952	23	20
MOBILE, ALA	107	20	1	26	52	3	5
MONROE, LA	77	20	1	24	32	—	—
MONTGOMERY, ALA	89	25	4	26	29	4	1
MUNCIE, IND	91	43	1	29	16	2	—
MUSKEGON-MUSKEGON HEIGHTS, MICH	59	4	—	21	31	—	3
NASHVILLE, TENN	478	191	42	126	114	3	2
NEW BEDFORD, MASS	18	5	—	4	9	—	—
NEW BRITAIN, CONN	39	11	1	18	7	—	2
NEW HAVEN, CONN	1,190	609	69	303	197	5	7
NEW LONDON-GROTON-NORWICH, CONN	281	98	5	79	92	5	2
NEW ORLEANS, LA	1,278	339	52	365	498	15	9
NEW YORK, N.Y	14,870	5,469	802	4,188	4,042	198	171
NEWARK, N.J	4,462	1,685	45	1,120	1,503	51	58
NEWPORT NEWS-HAMPTON, VA	225	24	1	71	118	10	1
NORFOLK-PORTSMOUTH, VA	209	42	4	76	79	7	1
NORWALK, CONN	202	41	1	84	73	2	1
ODESSA, TEX	49	4	—	11	33	—	1
OGDEN, UTAH	89	12	—	33	44	—	—
OKLAHOMA CITY, OKLA	939	238	31	260	376	19	15
OMAHA, NEBR.-IOWA	371	96	14	118	116	20	7
ORLANDO, FLA	290	65	3	96	121	2	3
PATERSON-CLIFTON-PASSAIC, N.J	1,242	317	11	365	514	17	18
PENSACOLA, FLA	103	20	2	26	50	3	2
PEORIA, ILL	263	93	1	79	88	—	2
PHILADELPHIA, PA.-N.J	6,197	2,150	309	1,499	2,095	85	59
PHOENIX, ARIZ	687	232	10	209	208	18	10
PITTSBURGH, PA	2,932	1,103	58	705	1,028	17	21
PITTSFIELD, MASS	94	27	—	27	39	—	1
PONCE, P.R	19	3	—	3	13	—	—
PORTLAND, MAINE	69	11	2	19	35	1	1
PORTLAND, OREG.-WASH	732	253	37	176	258	6	2
PROVIDENCE-PAWTUCKET-WARWICK, R.I.-MASS	676	265	9	170	217	8	7
PROVO-OREM, UTAH	196	104	1	43	46	1	1
PUEBLO, COLO	53	9	3	26	14	1	—
RACINE, WIS	120	26	—	36	53	—	5
RALEIGH, N.C	601	336	5	163	94	2	1
READING, PA	133	29	—	28	68	6	2
RENO, NEV	180	85	—	44	43	5	3
RICHMOND, VA	541	192	38	115	185	4	7
ROANOKE, VA	46	23	—	8	14	1	—
ROCHESTER, N.Y	1,752	620	67	410	619	19	17
ROCKFORD, ILL	51	14	2	14	21	—	—
SACRAMENTO, CALIF	1,396	544	7	334	471	28	12
SAGINAW, MICH	22	4	1	3	13	1	—
ST. JOSEPH, MO	20	5	—	5	10	—	—
ST. LOUIS, MO.-ILL	2,252	731	107	591	772	31	20
SALT LAKE CITY, UTAH	796	241	38	220	285	6	6
SAN ANGELO, TEX	32	3	—	14	11	3	1
SAN ANTONIO, TEX	543	149	23	157	193	15	6
SAN BERNARDINO-RIVERSIDE-ONTARIO, CALIF	842	321	13	229	248	21	10
SAN DIEGO, CALIF	1,471	559	30	374	476	22	10
SAN FRANCISCO-OAKLAND, CALIF	6,342	2,511	179	1,505	2,015	70	62
SAN JOSE, CALIF	2,761	1,143	59	740	765	27	27
SAN JUAN, P.R	215	79	6	59	64	1	6
SANTA BARBARA, CALIF	437	170	1	124	131	6	5
SAVANNAH, GA	118	24	—	38	51	3	2
SCRANTON, PA	67	26	—	20	17	2	2
SEATTLE-EVERETT, WASH	1,708	575	98	435	575	14	11

TABLE A-26.—NUMBER OF SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND HIGHEST DEGREE, 1964—CONTINUED

LOCATION	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
STANDARD METROPOLITAN STATISTICAL AREAS - CONTINUED							
SHREVEPORT, LA	259	17	2	71	155	9	5
SIOUX CITY, IOWA-NEB	34	6	1	12	14	1	------
SIOUX FALLS, S. DAK	45	14	------	19	9	3	------
SOUTH BEND, IND	312	137	------	63	103	5	4
SPOKANE, WASH	134	34	------	45	50	4	1
SPRINGFIELD, ILL	66	8	2	26	30	------	------
SPRINGFIELD, MO	80	31	1	26	22	------	------
SPRINGFIELD, OHIO	35	17	------	12	6	------	------
SPRINGFIELD-CHICOPEE-HOLYOKE, MASS.-CONN	386	117	3	120	143	1	2
STAMFORD, CONN	476	193	1	140	136	3	3
STEUBENVILLE-WEIRTON, OHIO-W.VA	31	10	1	9	11	------	------
STOCKTON, CALIF	104	39	------	35	26	4	------
SYRACUSE, N.Y	1,000	396	30	274	284	8	8
TACOMA, WASH	220	48	6	56	103	7	------
TAMPA-ST. PETERSBURG, FLA	315	114	6	107	74	7	7
TERRE HAUTE, IND	189	88	3	48	50	------	------
TEXARKANA, TEX.-ARK	8	------	------	3	5	------	------
TOLEDO, OHIO-MICH	421	154	5	113	144	2	3
TOPEKA, KANS	156	62	8	39	44	2	1
TRENTON, N.J	1,515	761	10	375	352	7	10
TUCSON, ARIZ	721	323	8	212	167	7	4
TULSA, OKLA	719	166	2	180	350	15	6
TUSCALOOSA, ALA	156	78	------	43	35	------	------
TYLER, TEX	134	4	------	44	82	2	2
UTICA-ROME, N.Y	140	28	2	47	57	2	4
VALLEJO-NAPA, CALIF	102	23	3	34	36	2	4
WACO, TEX	125	44	------	24	49	8	------
WASHINGTON, D.C.-MD.-VA	11,788	4,673	486	3,278	3,121	128	102
WATERBURY, CONN	186	31	------	38	113	3	1
WATERLOO, IOWA	42	18	1	13	8	------	2
WEST PALM BEACH, FLA	85	32	1	28	23	------	1
WHEELING, W.VA.-OHIO	32	7	------	6	18	1	------
WICHITA, KANS	401	58	2	106	225	7	3
WICHITA FALLS, TEX	10	------	------	3	4	3	------
WILKES-BARRE-HAZLETON, PA	86	24	1	33	25	2	1
WILMINGTON, DEL.-N.J.-MD	2,594	1,364	11	484	715	7	13
WINSTON-SALEM, N.C	195	93	19	29	49	3	2
WORCESTER, MASS	341	163	7	82	80	3	6
YORK, PA	94	17	1	28	44	2	2
YOUNGSTOWN-WARREN, OHIO	106	21	2	38	42	3	------
OTHER LOCATIONS	57,101	19,117	728	16,614	19,334	837	471

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-27.—NUMBER OF SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND TYPE OF EMPLOYER, 1964

LOCATION	TOTAL	TYPE OF EMPLOYER									NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF EMPLOYED	OTHER			
ALL LOCATIONS	223,854	77,727	23,405	7,472	5,522	8,722	84,421	4,277	1,434		9,617	1,257
STANDARD METROPOLITAN STATISTICAL AREAS	166,753	53,376	16,942	4,926	3,460	7,765	67,819	3,488	1,085		6,988	904
ABILENE, TEX	156	42	5	4	8	1	69	17	1		6	3
AKRON, OHIO	983	178	------	12	------	11	747	6	------		24	5
ALBANY, GA	32	5	7	1	16	------	2	1	------		------	------
ALBANY-SCHENECTADY-TROY, N.Y	1,407	412	46	151	6	12	722	4	2		48	4
ALBUQUERQUE, N.MEX	655	138	112	28	58	32	249	4	14		18	2
ALLENTOWN-BETHLEHEM-EASTON, PA.-N.J	587	213	2	7	------	11	303	8	5		35	3
ALTOONA, PA	16	6	1	------	------	------	8	------	------		1	------
AMARILLO, TEX	317	39	42	6	12	5	173	29	1		10	------
ANAHEIM-SANTA ANA-GARDEN GROVE, CALIF	1,160	128	5	14	9	6	933	20	5		33	7
ANN ARBOR, MICH	1,547	1,154	31	21	10	23	176	14	2		106	10
ASHEVILLE, N.C	142	9	73	4	1	1	42	3	------		9	------
ATLANTA, GA	1,053	453	164	44	48	7	251	30	14		38	4
ATLANTIC CITY, N.J	60	4	30	4	3	2	9	1	------		7	------
AUGUSTA, GA.-S.C	304	58	35	16	8	1	163	2	16		3	2
AUSTIN, TEX	827	553	32	49	6	9	97	10	2		64	5
BAKERSFIELD, CALIF	332	31	34	7	31	------	206	19	1		3	------
BALTIMORE, MD	1,879	720	154	72	51	64	656	21	11		117	13
BATON ROUGE, LA	665	327	27	19	------	1	260	2	3		25	1
BAY CITY, MICH	70	35	3	3	------	2	24	1	1		1	------
BEAUMONT-PORT ARTHUR, TEX	412	47	6	1	------	1	339	4	2		10	2
BILLINGS, MONT	113	13	15	2	------	------	77	5	1		------	------
BINGHAMTON, N.Y.-PA	349	89	3	4	------	3	238	3	------		8	1
BIRMINGHAM, ALA	275	114	7	3	------	51	84	6	3		7	------
BOISE CITY, IDAHO	------	------	------	------	------	------	------	------	------		------	------
BOSTON, MASS	7,230	3,036	537	125	100	516	2,278	90	49		457	42
BRIDGEPORT, CONN	201	49	7	1	------	5	121	7	------		11	------
BROCKTON, MASS	44	17	14	------	------	1	8	1	------		3	------
BROWNSVILLE-HARLINGEN-SAN BENITO, TEX	34	5	16	2	1	------	7	2	------		1	------
BUFFALO, N.Y	1,599	483	43	90	------	131	759	11	8		67	7
CANTON, OHIO	104	34	------	2	------	6	57	1	1		3	------
CEDAR RAPIDS, IOWA	102	50	------	1	------	------	47	1	------		3	------
CHAMPAIGN-URBANA, ILL	1,495	1,189	29	101	25	6	14	3	2		116	10
CHARLESTON, S.C	157	66	24	2	19	------	41	1	------		3	1
CHARLESTON, W.VA	565	23	4	20	------	1	496	2	2		16	1
CHARLOTTE, N.C	224	59	4	3	------	6	143	3	2		5	------
CHATTANOOGA, TENN.-GA	169	24	13	8	1	4	111	2	1		5	------
CHICAGO, ILL	7,615	2,761	210	177	37	531	3,320	161	64		312	42
CINCINNATI, OHIO-KY.-IND	1,528	354	212	20	44	31	761	19	11		68	8
CLEVELAND, OHIO	2,550	686	301	42	7	104	1,241	44	19		90	16
COLORADO SPRINGS, COLO	167	52	16	2	40	14	34	1	------		6	2
COLUMBIA, S.C	184	110	16	23	3	------	19	3	------		10	------
COLUMBUS, GA.-ALA	47	10	3	1	19	1	12	------	------		1	------
COLUMBUS, OHIO	1,760	839	63	86	28	341	258	19	20		95	11
CORPUS CHRISTI, TEX	432	15	5	4	7	------	356	38	1		4	2
DALLAS, TEX	1,399	261	48	13	5	33	921	60	18		36	4
DAVENPORT-ROCK ISLAND-MOLINE, IOWA-ILL	124	43	36	3	2	3	31	1	1		4	------
DAYTON, OHIO	997	147	285	21	117	49	330	6	13		26	3
DECATUR, ILL	117	26	------	3	------	1	84	1	------		1	1
DENVER, COLO	2,609	658	683	81	59	133	761	88	18		109	19
DES MOINES, IOWA	171	51	12	17	------	6	74	5	1		5	------
DETROIT, MICH	2,256	659	53	85	14	122	1,171	37	12		94	9
DUBUQUE, IOWA	51	38	1	------	------	1	8	1	1		1	------
DULUTH-SUPERIOR, MINN.-WIS	162	90	10	6	5	7	36	1	------		7	------
DURHAM, N.C	648	368	35	1	4	57	137	3	3		38	2
EL PASO, TEX	149	49	15	2	24	4	46	3	1		5	------
ERIE, PA	127	44	1	1	------	3	73	1	1		3	------
EUGENE, OREG	338	238	35	7	------	4	19	1	1		29	4
EVANSVILLE, IND.-KY	208	30	4	3	------	4	150	11	------		4	2
FALL RIVER, MASS.-R.I	30	10	------	------	1	1	15	------	1		2	------
FARGO-MOORHEAD, N.DAK.-MINN	174	137	19	5	1	------	2	1	------		8	1
FITCHBURG-LEOMINSTER, MASS	31	6	------	1	------	1	22	1	------		------	------
FLINT, MICH	117	62	3	1	------	3	41	3	2		2	------
FORT LAUDERDALE-HOLLYWOOD, FLA	75	20	6	5	------	1	16	8	------		17	2
FORT SMITH, ARK.-OKLA	18	4	------	1	2	1	7	3	------		------	------
FORT WAYNE, IND	178	55	3	11	------	5	96	3	------		4	1
FORT WORTH, TEX	442	124	43	6	8	3	219	18	2		14	5
FRESNO, CALIF	208	97	38	29	------	2	30	6	------		6	------
GADSDEN, ALA	3	1	------	------	------	------	1	1	------		------	------
GALVESTON-TEXAS CITY, TEX	244	64	12	------	------	1	153	3	1		9	1
GARY-HAMMOND-EAST CHICAGO, IND	426	86	1	3	------	6	321	2	------		6	1
GRAND RAPIDS, MICH	178	78	5	4	------	7	70	8	2		4	------
GREAT FALLS, MONT	56	7	19	5	13	2	7	1	------		1	1
GREEN BAY, WIS	54	23	1	3	1	1	23	------	------		1	1
GREENSBORO-HIGH POINT, N.C	165	77	4	6	------	2	67	2	1		5	1
GREENVILLE, S.C	66	24	1	1	------	1	30	7	------		2	------
HAMILTON-MIDDLETOWN, OHIO	157	111	------	------	------	------	38	1	------		7	------
HARRISBURG, PA	220	44	18	89	4	5	54	2	1		3	------
HARTFORD, CONN	747	118	17	45	1	70	463	9	3		15	6
HONOLULU, HAWAII	590	288	88	38	28	27	84	8	4		24	1
HOUSTON, TEX	2,642	432	109	15	18	31	1,827	113	5		81	11
HUNTINGTON-ASHLAND, W.VA.-KY.-OHIO	161	39	9	1	------	1	101	3	3		3	1
HUNTSVILLE, ALA	500	13	223	11	23	2	217	1	3		6	1
INDIANAPOLIS, IND	905	212	56	40	2	8	544	8	6		26	3
JACKSON, MICH	41	14	------	4	------	------	22	------	------		1	------
JACKSON, MISS	314	71	30	18	2	------	171	15	1		4	2
JACKSONVILLE, FLA	147	16	19	16	14	3	65	9	------		5	------
JERSEY CITY, N.J	548	156	8	6	------	6	350	4	1		14	3

TABLE A-27.—NUMBER OF SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND TYPE OF EMPLOYER, 1964—CONTINUED

LOCATION	TOTAL	TYPE OF EMPLOYER									NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER			
STANDARD METROPOLITAN STATISTICAL AREAS-CONTINUED												
JOHNSTOWN, PA	42	25	2	3	------	------	7	1	------		3	1
KALAMAZOO, MICH	405	107	2	2	------	4	277	3	1		9	------
KANSAS CITY, MO.-KANS	775	174	91	9	28	100	317	19	11		22	4
KENOSHA, WIS	11	4	1	------	------	------	5	------	------		------	1
KNOXVILLE, TENN	1,345	329	113	43	2	43	725	9	26		47	8
LAFAYETTE, LA	277	38	1	2	------	------	213	16	2		3	2
LAKE CHARLES, LA	136	25	6	------	------	1	101	1	1		1	------
LANCASTER, PA	310	68	1	1	------	8	218	2	1		11	------
LANSING, MICH	995	775	37	84	3	8	23	9	1		45	10
LAREDO, TEX	12	1	3	------	4	------	1	2	------		1	------
LAS VEGAS, NEV	147	26	44	10	11	------	51	2	1		2	------
LAWRENCE-HAVERHILL, MASS.-N.H	86	35	2	1	1	1	38	2	2		3	1
LAWTON, OKLA	25	5	2	2	15	------	1	------	------		------	------
LEWISTON-AUBURN, MAINE	14	10	------	2	------	------	1	------	------		1	------
LEXINGTON, KY	449	322	39	8	6	20	29	5	1		18	1
LIMA, OHIO	34	7	------	1	------	------	22	1	------		2	1
LINCOLN, NEBR	514	349	56	15	10	8	32	2	2		35	5
LITTLE ROCK-NORTH LITTLE ROCK, ARK	194	82	42	25	7	5	29	1	------		3	------
LORAIN-ELYRIA, OHIO	140	44	------	5	------	------	85	------	------		6	------
LOS ANGELES-LONG BEACH, CALIF	9,390	2,792	287	292	55	789	4,367	315	44		395	54
LOUISVILLE, KY.-IND	524	170	24	11	2	10	280	7	1		16	3
LOWELL, MASS	110	41	1	2	------	2	54	2	------		8	------
LUBBOCK, TEX	215	143	7	5	7	------	34	5	1		9	4
LYNCHBURG, VA	91	38	2	3	------	------	43	1	------		4	------
MACON, GA	54	11	16	5	12	------	9	------	------		1	------
MADISON, WIS	1,754	1,310	101	82	11	26	77	5	5		112	25
MANCHESTER, N.H	19	11	------	1	1	1	4	1	------		------	------
MAYAGUEZ, P.R	62	45	7	2	------	------	5	1	------		1	1
MEMPHIS, TENN.-ARK	382	163	32	4	4	23	133	6	6		10	1
MERIDEN, CONN	6	1	------	1	------	------	2	1	------		1	------
MIAMI, FLA	545	275	83	21	14	26	67	24	4		26	5
MIDLAND, TEX	608	6	2	------	------	------	514	68	2		14	2
MILWAUKEE, WIS	878	336	42	30	3	22	392	18	4		28	3
MINNEAPOLIS-ST. PAUL, MINN	2,898	1,172	162	103	5	43	1,249	23	12		109	20
MOBILE, ALA	107	23	17	2	9	3	51	1	------		1	------
MONROE, LA	77	31	------	3	------	------	40	1	1		1	------
MONTGOMERY, ALA	89	17	12	21	27	3	2	4	1		1	1
MUNCIE, IND	91	65	------	2	1	2	18	1	------		2	------
MUSKEGON-MUSKEGON HEIGHTS, MICH	59	12	1	1	1	1	40	1	------		2	------
NASHVILLE, TENN	478	282	27	39	1	12	84	4	1		24	4
NEW BEDFORD, MASS	18	11	------	------	------	------	5	------	------		2	------
NEW BRITAIN, CONN	39	26	------	2	------	2	8	------	------		1	------
NEW HAVEN, CONN	1,190	704	30	38	2	24	257	7	6		112	10
NEW LONDON-GROTON-NORWICH, CONN	281	36	63	6	18	5	144	2	------		3	4
NEW ORLEANS, LA	1,278	394	159	19	12	8	611	26	6		35	8
NEW YORK, N.Y	14,870	4,655	423	494	247	1,498	5,954	639	182		673	105
NEWARK, N.J	4,462	404	171	23	11	51	3,523	83	11		172	13
NEWPORT NEWS-HAMPTON, VA	225	19	136	------	45	1	17	1	1		5	------
NORFOLK-PORTSMOUTH, VA	209	60	35	14	53	2	37	3	------		5	------
NORWALK, CONN	202	24	------	4	------	4	148	11	1		9	1
ODESSA, TEX	49	7	1	------	------	------	39	------	------		------	2
OGDEN, UTAH	89	24	43	2	1	------	18	1	------		------	------
OKLAHOMA CITY, OKLA	939	304	83	21	23	22	374	55	2		44	11
OMAHA, NEBR.-IOWA	371	128	49	9	94	9	65	4	3		8	2
ORLANDO, FLA	290	34	45	5	10	4	173	8	2		8	1
PATERSON-CLIFTON-PASSAIC, N.J	1,242	146	3	10	1	38	959	30	2		48	5
PENSACOLA, FLA	103	14	12	1	14	------	58	2	------		2	------
PEORIA, ILL	263	51	136	11	------	1	61	1	------		1	1
PHILADELPHIA, PA.-N.J	6,197	1,691	345	108	39	340	3,266	93	36		253	26
PHOENIX, ARIZ	687	275	65	41	16	10	209	23	7		35	6
PITTSBURGH, PA	2,932	876	111	25	2	185	1,548	31	14		129	11
PITTSFIELD, MASS	94	6	------	1	------	------	85	------	------		2	------
PONCE, P.R	19	4	2	2	------	------	11	------	------		------	------
PORTLAND, MAINE	69	17	2	3	1	4	37	1	------		4	------
PORTLAND, OREG.-WASH	732	281	154	39	6	27	167	24	4		29	1
PROVIDENCE-PAWTUCKET-WARWICK, R.I.-MASS	676	384	24	18	11	21	155	7	1		48	7
PROVO-OREM, UTAH	196	144	6	4	------	1	16	7	------		16	2
PUEBLO, COLO	53	21	10	7	------	3	7	3	------		2	------
RACINE, WIS	120	17	------	3	------	1	96	------	------		2	1
RALEIGH, N.C	601	447	40	58	------	3	24	2	1		23	3
READING, PA	133	32	1	2	1	4	84	1	------		7	1
RENO, NEV	180	114	27	5	6	1	13	4	1		7	2
RICHMOND, VA	541	150	17	39	1	16	293	7	5		12	1
ROANOKE, VA	46	22	8	4	------	------	8	1	------		3	------
ROCHESTER, N.Y	1,752	534	8	16	3	21	1,083	5	4		73	5
ROCKFORD, ILL	51	12	1	1	------	1	31	4	------		1	------
SACRAMENTO, CALIF	1,396	630	93	230	33	2	322	20	8		54	4
SAGINAW, MICH	22	4	------	1	------	3	10	1	2		1	------
ST. JOSEPH, MO	20	5	1	1	------	2	10	------	1		------	------
ST. LOUIS, MO.-ILL	2,252	656	124	44	92	39	1,147	35	20		85	10
SALT LAKE CITY, UTAH	796	337	97	42	15	12	228	15	3		40	7
SAN ANGELO, TEX	32	6	3	3	3	------	8	6	1		2	------
SAN ANTONIO, TEX	543	84	99	19	104	66	101	46	3		17	4
SAN BERNARDINO-RIVERSIDE-ONTARIO, CALIF	842	392	112	31	54	55	142	11	4		38	3
SAN DIEGO, CALIF	1,471	514	192	26	54	52	522	23	8		70	10
SAN FRANCISCO-OAKLAND, CALIF	6,342	2,660	616	242	199	391	1,734	136	29		306	29
SAN JOSE, CALIF	2,761	907	265	57	14	54	1,225	45	8		166	20
SAN JUAN, P.R	215	106	38	29	[illegible]	[illegible]	[illegible]	8	1		8	4
SANTA BARBARA, CALIF	437	148	17	7	15	13	144	1	[illegible]		30	2
SAVANNAH, GA	118	18	25	2	12	2	52	2	------		2	------
SCRANTON, PA	67	40	1	2	------	1	18	2	1		1	1

TABLE A-27.—NUMBER OF SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND TYPE OF EMPLOYER, 1964—CONTINUED

LOCATION	TOTAL	TYPE OF EMPLOYER								NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER		
STANDARD METROPOLITAN STATISTICAL AREAS-CONTINUED											
SEATTLE-EVERETT, WASH	1,708	809	119	42	14	20	582	34	7	73	8
SHREVEPORT, LA	259	17	11	2	19	1	173	25	1	6	4
SIOUX CITY, IOWA-NEBR	34	14	4	4	3	1	6	1	----	1	----
SIOUX FALLS, S.DAK	45	26	5	1	----	2	9	2	----	----	----
SOUTH BEND, IND	312	224	3	3	----	3	50	----	----	26	3
SPOKANE, WASH	134	53	19	6	7	3	36	3	1	4	2
SPRINGFIELD, ILL	66	7	2	33	----	----	19	2	1	2	----
SPRINGFIELD, MO	80	49	5	4	----	----	17	2	----	3	----
SPRINGFIELD, OHIO	35	28	----	1	----	----	2	1	----	2	1
SPRINGFIELD-CHICOPEE-HOLYOKE, MASS.-CONN	386	107	16	5	1	4	233	2	2	15	1
STAMFORD, CONN	476	29	----	2	----	4	422	7	----	12	----
STEUBENVILLE-WEIRTON, OHIO-W.VA	31	13	----	----	----	----	15	1	----	2	----
STOCKTON, CALIF	104	53	5	19	----	1	17	4	1	3	1
SYRACUSE, N.Y	1,000	487	16	22	7	8	377	13	1	61	8
TACOMA, WASH	220	69	14	16	29	9	65	3	----	12	3
TAMPA-ST. PETERSBURG, FLA	315	128	16	14	12	14	89	13	3	23	3
TERRE HAUTE, IND	189	88	1	1	2	----	86	2	----	8	1
TEXARKANA, TEX.-ARK	8	2	1	2	----	----	1	----	----	2	----
TOLEDO, OHIO-MICH	421	161	2	13	----	2	219	8	----	15	1
TOPEKA, KANS	156	39	17	28	12	34	19	1	1	4	1
TRENTON, N.J	1,515	458	22	77	2	89	721	15	19	98	14
TUCSON, ARIZ	721	473	48	11	12	27	73	17	1	53	6
TULSA, OKLA	719	56	17	7	----	17	560	35	2	24	1
TUSCALOOSA, ALA	156	104	14	12	2	1	16	----	----	5	2
TYLER, TEX	134	6	----	1	----	----	103	21	1	1	1
UTICA-ROME, N.Y	140	41	26	6	9	5	44	1	1	7	----
VALLEJO-NAPA, CALIF	102	22	20	16	27	2	8	2	1	2	2
WACO, TEX	125	50	15	3	17	1	26	2	----	10	1
WASHINGTON, D.C.-MD.-VA	11,798	1,386	7,011	127	862	696	1,095	117	144	298	52
WATERBURY, CONN	186	15	1	3	----	3	156	3	----	5	----
WATERLOO, IOWA	42	25	----	----	----	----	10	1	1	4	1
WEST PALM BEACH, FLA	85	32	5	1	----	3	27	3	----	12	2
WHEELING, W.VA.-OHIO	32	12	1	----	1	1	14	1	----	2	----
WICHITA, KANS	401	63	9	5	8	15	245	34	4	17	1
WICHITA FALLS, TEX	10	1	2	----	4	----	1	2	----	----	----
WILKES-BARRE-HAZLETON, PA	86	41	4	4	1	5	20	3	1	5	2
WILMINGTON, DEL.-N.J.-MD	2,594	202	20	10	4	13	2,236	8	2	93	6
WINSTON-SALEM, N.C	195	92	4	2	----	3	88	2	----	3	1
WORCESTER, MASS	341	149	5	10	2	54	91	4	5	17	4
YORK, PA	94	32	1	3	----	2	46	4	2	3	1
YOUNGSTOWN-WARREN, OHIO	106	50	2	7	1	4	40	----	2	----	----
OTHER LOCATIONS	57,101	24,351	6,463	2,546	2,062	957	16,602	789	349	2,629	353

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-28.—NUMBER OF SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND WORK ACTIVITY, 1964

LOCATION	TOTAL	WORK ACTIVITY								NOT EMPLOYED	NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER		
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D					
ALL LOCATIONS	223,854	77,699	35,781	30,280	46,255	24,568	41,209	16,582	26,301	9,617	6,191
STANDARD METROPOLITAN STATISTICAL AREAS	166,753	61,147	28,345	23,445	34,675	19,545	26,840	12,523	20,071	6,988	4,509
ABILENE, TEX	156	9	6	3	23	4	33	9	71	6	5
AKRON, OHIO	983	392	78	173	214	154	127	145	54	24	27
ALBANY, GA	32	5	3	2	7	1	5	2	12	------	1
ALBANY-SCHENECTADY-TROY, N.Y	1,407	622	297	228	242	158	262	111	88	48	34
ALBUQUERQUE, N.MEX	655	254	105	125	165	106	85	22	97	18	14
ALLENTOWN-BETHLEHEM-EASTON, PA.-N.J	587	184	47	95	102	58	160	62	33	35	11
ALTOONA, PA	16	2	------	1	3	2	4	5	1	1	------
AMARILLO, TEX	317	37	12	24	44	12	31	34	150	10	11
ANAHEIM-SANTA ANA-GARDEN GROVE, CALIF	1,160	489	70	260	314	229	107	76	119	33	22
ANN ARBOR, MICH	1,547	693	460	195	160	121	445	21	93	106	29
ASHEVILLE, N.C	142	45	6	29	36	16	8	10	32	9	2
ATLANTA, GA	1,053	247	119	107	252	110	265	88	134	38	29
ATLANTIC CITY, N.J	60	21	1	14	21	14	------	2	9	7	------
AUGUSTA, GA.-S.C	304	105	29	57	82	36	25	51	32	3	6
AUSTIN, TEX	827	343	251	76	97	52	215	18	65	64	25
BAKERSFIELD, CALIF	332	56	11	35	59	23	21	41	146	3	6
BALTIMORE, MD	1,879	790	405	272	322	197	314	134	152	117	50
BATON ROUGE, LA	665	265	103	113	118	62	143	61	34	25	19
BAY CITY, MICH	70	19	8	9	16	6	19	7	7	1	1
BEAUMONT-PORT ARTHUR, TEX	412	102	9	55	83	29	40	142	26	10	9
BILLINGS, MONT	113	3	------	2	16	2	12	12	70	------	------
BINGHAMTON, N.Y.-PA	349	133	12	65	81	48	70	34	19	8	4
BIRMINGHAM, ALA	275	95	47	41	52	25	59	32	24	7	6
BOISE CITY, IDAHO	------	------	------	------	------	------	------	------	------	------	------
BOSTON, MASS	7,230	3,466	2,024	1,034	1,181	777	1,087	290	568	457	181
BRIDGEPORT, CONN	201	51	5	20	56	32	40	22	17	11	4
BROCKTON, MASS	44	12	7	3	7	2	16	1	5	3	------
BROWNSVILLE-HARLINGEN-SAN BENITO, TEX	34	10	6	4	7	1	5	4	6	1	1
BUFFALO, N.Y	1,599	634	271	239	307	193	283	155	119	67	34
CANTON, OHIO	104	30	3	19	23	9	25	10	11	3	2
CEDAR RAPIDS, IOWA	102	28	2	19	11	6	43	9	7	3	1
CHAMPAIGN-URBANA, ILL	1,495	668	539	121	124	79	431	8	96	116	52
CHARLESTON, S.C	157	30	10	16	26	8	50	12	28	3	8
CHARLESTON, W.VA	565	262	51	102	127	79	22	100	33	16	5
CHARLOTTE, N.C	224	32	3	12	54	23	54	45	24	5	10
CHATTANOOGA, TENN.-GA	169	44	4	24	44	25	21	40	13	5	2
CHICAGO, ILL	7,615	2,901	1,393	1,152	1,608	917	1,147	690	764	312	193
CINCINNATI, OHIO-KY.-IND	1,528	541	202	221	354	218	233	157	130	68	45
CLEVELAND, OHIO	2,550	1,084	451	458	508	314	329	238	228	90	73
COLORADO SPRINGS, COLO	167	32	3	22	33	10	65	8	19	6	4
COLUMBIA, S.C	184	37	25	11	35	13	66	13	18	10	5
COLUMBUS, GA.-ALA	47	8	------	8	14	4	5	4	10	1	5
COLUMBUS, OHIO	1,760	573	298	236	316	199	427	58	244	95	47
CORPUS CHRISTI, TEX	432	64	11	28	69	25	11	75	202	4	7
DALLAS, TEX	1,399	437	139	227	320	139	168	107	290	36	41
DAVENPORT-ROCK ISLAND-MOLINE, IOWA-ILL	124	23	4	16	26	11	42	16	11	4	2
DAYTON, OHIO	997	432	187	186	275	203	110	58	71	26	25
DECATUR, ILL	117	35	9	20	29	15	22	20	6	1	4
DENVER, COLO	2,609	907	513	312	440	206	378	142	559	109	74
DES MOINES, IOWA	171	21	3	13	57	14	40	15	31	5	2
DETROIT, MICH	2,256	747	274	337	488	260	431	235	210	94	51
DUBUQUE, IOWA	51	3	------	3	8	2	31	3	3	1	2
DULUTH-SUPERIOR, MINN.-WIS	162	13	2	10	35	8	75	9	21	7	2
DURHAM, N.C	648	338	242	95	82	65	147	5	23	38	15
EL PASO, TEX	149	18	5	11	28	8	35	24	33	5	6
ERIE, PA	127	41	7	27	25	14	35	12	8	3	3
EUGENE, OREG	338	93	83	9	56	15	122	8	18	29	12
EVANSVILLE, IND.-KY	208	63	21	32	50	25	24	26	35	4	6
FALL RIVER, MASS.-R.I	30	6	------	4	6	5	9	5	1	2	1
FARGO-MOORHEAD, N.DAK.-MINN	174	59	38	21	18	7	70	1	12	8	6
FITCHBURG-LEOMINSTER, MASS	31	8	------	3	9	7	7	5	2	------	------
FLINT, MICH	117	20	1	9	16	5	63	5	9	2	2
FORT LAUDERDALE-HOLLYWOOD, FLA	75	10	2	6	15	6	15	4	12	17	2
FORT SMITH, ARK.-OKLA	18	------	------	------	2	------	6	2	8	------	------
FORT WAYNE, IND	178	32	4	16	50	21	49	17	19	4	7
FORT WORTH, TEX	442	103	29	58	89	39	87	47	86	14	16
FRESNO, CALIF	208	34	8	26	38	12	89	13	17	6	11
GADSDEN, ALA	3	------	------	------	------	------	1	------	1	------	1
GALVESTON-TEXAS CITY, TEX	244	91	36	36	54	29	28	51	8	9	3
GARY-HAMMOND-EAST CHICAGO, IND	426	142	24	79	86	59	73	92	22	6	5
GRAND RAPIDS, MICH	178	19	2	11	34	16	67	23	25	4	6
GREAT FALLS, MONT	56	3	2	1	13	3	8	8	17	1	6
GREEN BAY, WIS	54	8	3	4	10	5	20	9	4	1	2
GREENSBORO-HIGH POINT, N.C	165	27	9	14	30	11	67	19	13	5	4
GREENVILLE, S.C	66	5	2	2	17	8	20	13	6	2	3
HAMILTON-MIDDLETON, OHIO	157	19	5	10	20	11	99	7	3	7	2
HARRISBURG, PA	220	37	12	17	68	32	37	22	43	3	10
HARTFORD, CONN	747	260	61	132	215	110	99	56	86	15	16
HONOLULU, HAWAII	590	184	90	83	118	48	134	43	66	24	21
HOUSTON, TEX	2,642	682	249	306	598	247	211	343	660	81	67

TABLE A-28.—NUMBER OF SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND WORK ACTIVITY, 1964—CONTINUED

LOCATION	TOTAL	WORK ACTIVITY								NOT EMPLOYED	NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER		
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D					
STANDARD METROPOLITAN STATISTICAL AREAS-CONTINUED											
HUNTINGTON-ASHLAND, W.VA.-KY.-OHIO	161	29	4	17	37	18	33	41	13	3	5
HUNTSVILLE, ALA	500	258	61	128	145	121	9	34	33	6	15
INDIANAPOLIS, IND	905	364	107	181	193	111	136	93	73	26	20
JACKSON, MICH	41	4	1	------	9	3	10	5	9	1	3
JACKSON, MISS	314	46	25	19	52	13	43	18	145	4	6
JACKSONVILLE, FLA	147	17	3	6	46	11	15	18	36	5	10
JERSEY CITY, N.J	548	197	45	94	124	75	89	74	35	14	15
JOHNSTOWN, PA	42	4	1	1	7	3	22	2	2	3	2
KALAMAZOO, MICH	405	155	58	73	98	65	91	23	23	9	6
KANSAS CITY, MO.-KANS	775	218	85	101	176	90	118	98	115	22	28
KENOSHA, WIS	11	1	------	1	2	------	4	3	------	------	1
KNOXVILLE, TENN	1,345	720	423	207	219	143	169	80	82	47	28
LAFAYETTE, LA	277	4	1	3	24	4	34	32	177	3	3
LAKE CHARLES, LA	136	21	7	9	35	7	23	45	8	1	3
LANCASTER, PA	310	125	19	56	70	43	63	28	10	11	3
LANSING, MICH	995	382	241	135	133	57	304	24	72	45	35
LAREDO, TEX	12	------	------	------	6	1	2	1	2	1	------
LAS VEGAS, NEV	147	45	4	31	39	17	20	11	29	2	1
LAWRENCE-HAVERHILL, MASS.-N.H	86	15	1	5	11	8	35	8	6	3	8
LAWTON, OKLA	25	3	1	2	5	3	6	1	8	------	2
LEWISTON-AUBURN, MAINE	14	------	------	------	------	------	8	------	2	1	3
LEXINGTON, KY	449	161	104	50	48	22	134	15	55	18	18
LIMA, OHIO	34	4	1	1	7	1	7	11	2	2	1
LINCOLN, NEBR	514	160	101	56	71	31	171	11	37	35	29
LITTLE ROCK-NORTH LITTLE ROCK, ARK	194	43	19	20	47	18	45	12	39	3	5
LORAIN-ELYRIA, OHIO	140	51	2	10	23	13	37	16	5	6	2
LOS ANGELES-LONG BEACH, CALIF	9,390	3,584	1,434	1,288	2,032	1,250	1,368	629	1,136	395	246
LOUISVILLE, KY.-IND	524	163	62	55	105	48	100	77	48	16	15
LOWELL, MASS	110	36	8	18	23	16	31	6	4	8	2
LUBBOCK, TEX	215	30	21	9	11	5	107	9	35	9	14
LYNCHBURG, VA	91	24	5	5	18	14	34	6	5	4	------
MACON, GA	54	6	1	5	15	5	11	7	13	1	1
MADISON, WIS	1,754	871	688	164	172	100	353	34	136	112	76
MANCHESTER, N.H	19	------	------	------	4	------	10	2	2	------	1
MAYAGUEZ, P.R	62	14	11	3	12	6	29	------	1	1	5
MEMPHIS, TENN.-ARK	382	81	42	30	69	38	103	44	55	10	
MERIDEN, CONN	6	1	1	------	1	1	------	1	2	1	------
MIAMI, FLA	545	178	127	46	78	35	117	24	110	26	12
MIDLAND, TEX	608	11	3	8	96	13	5	46	425	14	11
MILWAUKEE, WIS	878	221	78	91	198	105	235	76	90	28	30
MINNEAPOLIS-ST PAUL, MINN	2,898	1,180	537	444	572	351	508	201	234	109	94
MOBILE, ALA	107	15	2	8	29	10	21	24	15	1	2
MONROE, LA	77	12	2	7	17	8	25	14	6	1	2
MONTGOMERY, ALA	89	4	1	3	33	8	24	3	23	1	1
MUNCIE, IND	91	6	------	4	12	7	61	4	3	2	3
MUSKEGON-MUSKEGON HEIGHTS, MICH	59	20	------	12	15	6	9	7	5	2	1
NASHVILLE, TENN	478	157	107	29	81	47	140	16	44	24	16
NEW BEDFORD, MASS	18	6	4	1	1	1	7	2	------	2	------
NEW BRITAIN, CONN	39	4	------	4	5	1	25	------	2	1	2
NEW HAVEN, CONN	1,190	620	473	117	137	90	210	27	52	112	32
NEW LONDON-GROTON-NORWICH, CONN	281	137	29	82	54	36	38	24	15	3	10
NEW ORLEANS, LA	1,278	271	154	98	177	64	222	124	412	35	37
NEW YORK, N.Y	14,870	4,637	2,318	1,649	3,367	1,590	2,374	1,147	2,237	673	435
NEWARK, N.J	4,462	1,993	645	896	1,127	771	317	472	293	172	88
NEWPORT NEWS-HAMPTON, VA	225	104	48	50	49	26	17	6	43	5	1
NORFOLK-PORTSMOUTH, VA	209	32	1	25	58	17	53	26	29	5	6
NORWALK, CONN	202	79	7	34	53	36	18	9	30	9	4
ODESSA, TEX	49	3	------	2	16	7	5	18	7	------	------
OGDEN, UTAH	89	9	------	6	31	8	20	13	16	------	------
OKLAHOMA CITY, OKLA	939	145	91	45	139	44	203	55	317	44	36
OMAHA, NEBR.-IOWA	371	60	20	32	86	28	86	29	88	8	14
ORLANDO, FLA	290	111	15	60	88	55	28	23	24	8	8
PATERSON-CLIFTON-PASSAIC, N.J	1,242	418	85	210	345	207	107	185	106	48	33
PENSACOLA, FLA	103	29	7	4	27	12	14	19	9	2	3
PEORIA, ILL	263	131	62	65	49	27	46	17	13	1	6
PHILADELPHIA, PA.-N.J	6,197	2,518	1,035	1,020	1,304	791	896	573	517	253	136
PHOENIX, ARIZ	687	186	63	77	122	49	200	36	91	35	17
PITTSBURGH, PA	2,932	1,258	573	468	588	368	402	246	255	129	54
PITTSFIELD, MASS	94	47	8	23	24	14	7	11	2	2	1
PONCE, P.R	19	2	1	1	2	------	3	11	1	------	------
PORTLAND, MAINE	69	10	3	4	19	10	16	7	10	4	3
PORTLAND, OREG.-WASH	732	162	55	88	169	52	200	48	100	29	24
PROVIDENCE-PAWTUCKET-WARWICK, R.I.-MASS	676	220	162	40	101	47	183	56	40	48	28
PROVO-OREM, UTAH	196	28	16	8	27	11	103	2	12	16	8
PUEBLO, COLO	53	3	1	2	7	1	17	10	13	2	1
RACINE, WIS	120	46	10	20	31	19	15	13	7	2	6
RALEIGH, N.C	601	250	146	101	93	46	158	12	46	23	19
READING, PA	133	36	1	15	27	18	26	23	11	7	3
RENO, NEV	180	55	26	26	25	11	54	2	27	7	10
RICHMOND, VA	541	185	65	96	130	73	99	62	37	12	16
ROANOKE, VA	46	3	3	------	8	3	19	1	11	3	1
ROCHESTER, N.Y	1,752	834	341	297	329	207	203	169	102	73	42
ROCKFORD, ILL	51	13	------	7	12	6	11	4	9	1	1
SACRAMENTO, CALIF	1,396	547	270	209	263	135	207	91	189	54	45

TABLE A-28.—NUMBER OF SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND WORK ACTIVITY, 1964—CONTINUED

LOCATION	TOTAL	WORK ACTIVITY								NOT EMPLOYED	NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER		
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D					
STANDARD METROPOLITAN STATISTICAL AREAS-CONTINUED											
SAGINAW, MICH	22	2	------	2	4	1	5	4	5	1	1
ST. JOSEPH, MO	20	------	------	------	6	3	6	4	4	------	------
ST. LOUIS, MO.-ILL	2,252	759	303	329	540	247	318	280	216	85	54
SALT LAKE CITY, UTAH	796	213	130	68	149	61	156	42	164	40	32
SAN ANGELO, TEX	32	1	------	------	8	2	4	2	14	2	1
SAN ANTONIO, TEX	543	142	43	80	113	61	87	27	135	17	22
SAN BERNARDINO-RIVERSIDE-ONTARIO, CALIF	842	335	183	128	162	94	151	45	90	38	21
SAN DIEGO, CALIF	1,471	683	328	218	247	152	248	55	114	70	54
SAN FRANCISCO-OAKLAND, CALIF	6,342	2,850	1,564	979	1,116	632	829	380	691	306	170
SAN JOSE, CALIF	2,761	1,298	640	402	516	357	396	127	192	166	66
SAN JUAN, P.R	215	49	22	23	44	18	56	13	33	8	12
SANTA BARBARA, CALIF	437	162	55	75	78	48	88	23	44	30	12
SAVANNAH, GA	118	24	7	14	42	17	16	17	13	5	1
SCRANTON, PA	67	12	3	3	12	5	32	3	5	1	2
SEATTLE-EVERETT, WASH	1,708	698	373	247	268	143	332	83	193	73	61
SHREVEPORT, LA	259	16	5	8	46	11	14	42	128	6	7
SIOUX CITY, IOWA-NEBR	34	6	2	4	4	------	14	3	6	1	------
SIOUX FALLS, S.DAK	45	2	1	------	10	3	23	2	8	------	------
SOUTH BEND, IND	312	96	77	8	31	15	109	17	21	26	12
SPOKANE, WASH	134	15	3	10	39	12	42	8	21	4	5
SPRINGFIELD, ILL	66	8	2	5	28	10	7	6	12	2	3
SPRINGFIELD, MO	80	4	2	2	14	5	44	7	7	3	1
SPRINGFIELD, OHIO	35	------	------	------	2	1	27	1	3	2	------
SPRINGFIELD-CHICOPEE-HOLYOKE, MASS.-CONN	386	106	16	68	96	53	93	48	18	15	10
STAMFORD, CONN	476	230	55	129	133	103	23	28	37	12	13
STEUBENVILLE-WEIRTON, OHIO-W.VA	31	1	------	------	6	4	13	7	2	2	------
STOCKTON, CALIF	104	12	3	9	17	6	42	6	18	3	6
SYRACUSE, N.Y	1,000	374	180	120	151	74	258	54	77	61	25
TACOMA, WASH	220	38	10	22	52	9	41	23	43	12	11
TAMPA-ST.PETERSBURG, FLA	315	45	8	9	64	29	101	16	58	23	8
TERRE HAUTE, IND	189	39	11	17	31	11	74	19	13	8	5
TEXARKANA, TEX.-ARK	8	------	------	------	1	------	2	1	2	2	------
TOLEDO, OHIO-MICH	421	108	31	50	86	40	132	48	22	15	10
TOPEKA, KANS	156	20	3	16	34	17	40	12	43	4	3
TRENTON, N.J	1,515	793	470	265	273	187	150	60	106	98	35
TUCSON, ARIZ	721	250	152	84	74	38	221	11	85	53	27
TULSA, OKLA	719	167	34	114	170	74	44	72	230	24	12
TUSCALOOSA, ALA	156	28	19	7	21	8	77	6	13	5	6
TYLER, TEX	134	4	1	2	13	3	6	5	103	1	2
UTICA-ROME, N.Y	140	43	9	20	32	18	30	9	19	7	------
VALLEJO-NAPA, CALIF	102	14	1	7	13	8	25	5	39	2	4
WACO, TEX	125	25	7	13	19	7	32	6	25	10	8
WASHINGTON, D.C.-MD.-VA	11,788	4,801	2,458	1,980	3,811	2,510	684	394	1,474	298	326
WATERBURY, CONN	186	55	4	31	61	32	13	42	10	5	------
WATERLOO, IOWA	42	2	1	1	4	2	25	5	1	4	1
WEST PALM BEACH, FLA	85	25	4	16	19	10	16	1	9	12	3
WHEELING, W.VA.-OHIO	32	2	------	------	6	1	12	8	1	2	1
WICHITA, KANS	401	44	6	22	60	24	53	44	173	17	10
WICHITA FALLS, TEX	10	------	------	------	2	------	2	------	5	------	1
WILKES-BARRE-HAZLETON, PA	86	10	2	7	11	4	34	10	12	5	4
WILMINGTON, DEL.-N.J.-MD	2,594	1,166	386	581	660	413	90	309	216	93	60
WINSTON SALEM, N.C	195	81	42	24	26	20	51	11	18	3	5
WORCESTER, MASS	341	85	54	22	64	33	125	19	21	17	10
YORK, PA	94	15	------	8	22	8	27	10	13	3	4
YOUNGSTOWN-WARREN, OHIO	.106	18	------	13	16	4	43	13	14	------	2
OTHER LOCATIONS	57,101	16,552	7,436	6,835	11,580	5,023	14,369	4,059	6,230	2,629	1,682

(A)INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-29.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND FIELD, 1964

LOCATION	TOTAL	SCIENTIFIC AND TECHNICAL FIELD					
		CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES
ALL LOCATIONS	11,000	11,000	10,300	10,600	12,000	11,000	9,200
STANDARD METROPOLITAN STATISTICAL AREAS	11,300	11,300	10,600	10,900	12,000	11,700	10,300
ABILENE, TEX	9,000	—	10,000	—	—	—	—
AKRON, OHIO	11,000	11,500	—	—	11,600	9,600	—
ALBANY, GA	—	—	—	—	—	—	—
ALBANY-SCHENECTADY-TROY, N.Y	12,000	12,000	8,300	—	14,000	12,000	—
ALBUQUERQUE, N.MEX	12,300	12,400	10,000	—	13,600	13,000	10,700
ALLENTOWN-BETHLEHEM-EASTON, PA.-N.J	10,200	10,800	—	—	11,800	8,300	—
ALTOONA, PA	—	—	—	—	—	—	—
AMARILLO, TEX	9,600	9,000	10,000	—	—	—	—
ANAHEIM-SANTA ANA-GARDEN GROVE, CALIF	12,800	12,600	12,000	—	14,400	13,700	—
ANN ARBOR, MICH	11,600	11,000	9,800	—	11,500	11,800	—
ASHEVILLE, N.C	9,600	10,000	—	9,500	—	—	—
ATLANTA, GA	10,100	10,000	—	10,000	10,400	10,000	10,700
ATLANTIC CITY, N.J	12,100	—	—	—	—	—	—
AUGUSTA, GA.-S.C	11,100	11,100	—	—	11,500	—	—
AUSTIN, TEX	9,600	9,700	8,900	—	10,000	8,900	—
BAKERSFIELD, CALIF	10,500	11,000	10,900	—	—	—	—
BALTIMORE, MD	11,000	11,000	10,700	—	11,300	12,000	—
BATON ROUGE, LA	11,000	12,000	10,600	—	—	—	10,700
BAY CITY, MICH	11,000	—	—	—	—	—	—
BEAUMONT-PORT ARTHUR, TEX	10,500	10,800	11,300	—	—	—	—
BILLINGS, MONT	9,700	—	10,000	—	—	—	—
BINGHAMTON, N.Y.-PA	11,800	11,800	—	—	12,000	12,000	—
BIRMINGHAM, ALA	11,300	10,000	—	—	—	—	—
BOISE CITY, IDAHO	—	—	—	—	—	—	—
BOSTON, MASS	11,500	11,000	10,000	12,000	12,600	12,100	—
BRIDGEPORT, CONN	10,000	10,400	—	—	—	—	—
BROCKTON, MASS	9,800	—	—	—	—	—	—
BROWNSVILLE-HARLINGEN-SAN BENITO, TEX	9,300	—	—	—	—	—	—
BUFFALO, N.Y	10,800	11,000	—	—	11,800	9,700	—
CANTON, OHIO	9,700	10,000	—	—	—	—	—
CEDAR RAPIDS, IOWA	9,600	—	—	—	—	—	—
CHAMPAIGN-URBANA, ILL	11,000	10,000	10,000	—	12,000	9,900	10,700
CHARLESTON, S.C	9,800	10,500	—	—	—	—	—
CHARLESTON, W.VA	11,000	11,500	—	—	—	—	—
CHARLOTTE, N.C	10,000	11,500	—	—	—	—	—
CHATTANOOGA, TENN.-GA	9,700	10,500	—	—	—	—	—
CHICAGO, ILL	11,200	11,000	9,800	10,800	12,000	11,400	10,600
CINCINNATI, OHIO-KY.-IND	10,700	10,600	8,700	10,600	10,000	10,200	—
CLEVELAND, OHIO	11,000	11,000	9,600	—	11,600	10,500	—
COLORADO SPRINGS	10,300	—	—	—	—	12,200	—
COLUMBIA, S.C	9,800	9,700	—	—	—	—	—
COLUMBUS, GA.-ALA	10,600	—	—	—	—	—	—
COLUMBUS, OHIO	11,000	11,400	9,400	—	12,000	11,000	10,000
CORPUS CHRISTI, TEX	10,000	10,200	10,000	—	—	—	—
DALLAS, TEX	11,700	11,000	12,000	—	12,000	10,500	—
DAVENPORT-ROCK ISLAND-MOLINE, IOWA-ILL	9,200	10,000	—	—	—	—	—
DAYTON, OHIO	11,000	11,100	—	—	11,700	11,700	—
DECATUR, ILL	10,800	11,000	—	—	—	—	—
DENVER, COLO	11,000	10,000	11,500	11,600	11,000	10,000	10,600
DES MOINES, IOWA	10,000	9,300	—	—	—	12,000	—
DETROIT, MICH	10,900	11,000	8,400	—	11,400	10,800	—
DUBUQUE, IOWA	7,900	—	—	—	—	—	—
DULUTH-SUPERIOR, MINN.-WIS	8,400	9,300	—	—	—	—	—
DURHAM, N.C	12,000	12,000	—	—	10,800	11,800	—
EL PASO, TEX	9,600	—	—	—	—	—	—
ERIE, PA	10,000	10,300	—	—	—	—	—
EUGENE, OREG	9,300	9,600	—	—	—	—	7,500
EVANSVILLE, IND.-KY	10,000	10,600	9,600	—	—	—	—
FALL RIVER, MASS.-R.I	—	—	—	—	—	—	—
FARGO-MOORHEAD, N.DAK.-MINN	9,000	8,700	—	—	—	—	—
FITCHBURG-LEOMINSTER, MASS	10,000	—	—	—	—	—	—
FLINT, MICH	9,900	—	—	—	—	—	—
FORT LAUDERDALE-HOLLYWOOD, FLA	10,300	—	—	—	—	—	—
FORT SMITH, ARK.-OKLA	—	—	—	—	—	—	—
FORT WAYNE, IND	9,800	10,000	—	—	—	10,000	—
FORT WORTH, TEX	10,800	9,100	12,000	—	11,500	10,200	—
FRESNO, CALIF	9,800	9,500	—	—	—	—	9,500
GADSDEN, ALA	—	—	—	—	—	—	—
GALVESTON-TEXAS CITY, TEX	11,500	11,600	—	—	—	—	—
GARY-HAMMOND-EAST CHICAGO, IND	12,100	13,200	—	—	—	—	—
GRAND RAPIDS, MICH	9,000	9,300	—	—	—	—	—
GREAT FALLS, MONT	9,600	—	—	—	—	—	—
GREEN BAY, WIS	9,000	—	—	—	—	—	—
GREENSBORO-HIGH POINT, N.C	9,200	9,800	—	—	—	—	—
GREENVILLE, S.C	8,000	9,600	—	—	—	—	—
HAMILTON-MIDDLETOWN, OHIO	9,600	10,200	—	—	—	—	—
HARRISBURG, PA	9,300	9,300	8,400	—	—	—	—
HARTFORD, CONN	10,900	10,300	—	12,500	11,500	12,400	—
HONOLULU, HAWAII	10,300	10,000	10,600	—	—	11,000	10,600
HOUSTON, TEX	12,000	11,000	12,000	—	10,500	11,700	—
HUNTINGTON-ASHLAND, W.VA.-KY.-OHIO	9,000	9,000	—	—	—	—	—
HUNTSVILLE, ALA	11,700	12,000	—	—	11,700	11,400	—
INDIANAPOLIS, IND	10,500	11,000	—	—	9,100	10,500	—
JACKSON, MICH	9,300	—	—	—	—	—	—
JACKSON, MISS	10,100	—	10,200	—	—	—	—
JACKSONVILLE, FLA	9,800	9,000	—	—	—	—	—
JERSEY CITY, N.J	10,800	10,700	—	—	11,000	—	—
JOHNSTOWN, PA	7,700	—	—	—	—	—	—

TABLE A-29.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND FIELD, 1964—CONTINUED

LOCATION	SCIENTIFIC AND TECHNICAL FIELD						
	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELDS
ALL LOCATICNS	10,700	10,300	12,000	12,000	10,100	9,000	11,100
STANDARD METROPOLITAN STATISTICAL AREAS	11,300	10,500	12,000	12,500	10,400	9,300	11,700
ABILENE, TEX	------	------	------	------	------	------	------
AKRON, OHIO	8,200	9,600	------	11,100	------	------	11,100
ALBANY, GA	------	------	------	------	------	------	------
ALBANY-SCHENECTADY-TROY, N.Y	12,500	10,800	------	11,600	------	------	11,800
ALBUQUERQUF, N.MEX	12,000	11,300	------	------	------	------	12,100
ALLENTOWN-BETHLEHEM-EASTON, PA.-N.J	------	8,300	------	10,500	------	------	11,100
ALTOONA, PA	------	------	------	------	------	------	------
AMARILLO, TEX	------	------	------	------	------	------	------
ANAHEIM-SANTA ANA-GARDEN GROVE, CALIF	10,100	11,400	------	12,000	------	------	13,000
ANN ARBOR, MICH	12,100	11,500	------	12,500	11,200	9,000	11,900
ASHEVILLE, N.C	------	------	------	------	------	------	------
ATLANTA, GA	11,000	10,000	------	10,900	------	------	10,100
ATLANTIC CITY, N.J	------	------	------	------	------	------	------
AUGUSTA, GA.-S.C	12,900	------	------	------	------	------	11,000
AUSTIN, TEX	9,600	8,500	------	10,500	------	------	9,800
BAKERSFIELD, CALIF	------	------	------	------	------	------	10,400
BALTIMORE, MD	12,000	10,000	12,000	11,000	------	------	11,400
BATON ROUGE, LA	10,000	------	------	11,000	------	------	12,000
BAY CITY, MICH	------	------	------	------	------	------	------
BEAUMONT-PORT ARTHUR, TEX	------	------	------	------	------	------	11,100
BILLINGS, MONT	------	------	------	------	------	------	------
BINGHAMTON, N.Y.-PA	------	11,300	------	------	------	------	11,800
BIRMINGHAM, ALA	13,800	------	------	------	------	------	------
BOISE CITY, IDAHO	------	------	------	------	------	------	------
BOSTON, MASS	10,600	10,000	12,500	12,000	10,500	9,900	12,000
BRIDGEPORT, CONN	------	------	------	------	------	------	11,700
BROCKTON, MASS	------	------	------	------	------	------	------
BROWNSVILLE-HARLINGEN-SAN BENITO, TEX	------	------	------	------	------	------	------
BUFFALO, N.Y	11,500	10,000	------	12,000	9,400	------	11,000
CANTON, OHIO	------	------	------	------	------	------	------
CEDAR RAPIDS, IOWA	------	------	------	------	------	------	------
CHAMPAIGN-URBANA, ILL	11,600	12,500	------	12,600	------	------	12,000
CHARLESTON, S.C	10,000	------	------	------	------	------	------
CHARLESTON, W.VA	------	------	------	------	------	------	10,300
CHARLOTTE, N.C	------	------	------	------	------	------	------
CHATTANOOGA, TENN.-GA	------	------	------	------	------	------	------
CHICAGO, ILL	12,000	10,100	11,800	13,600	11,500	9,800	10,700
CINCINNATI, OHIC-KY.-IND	12,500	9,800	------	10,200	------	------	10,800
CLEVELAND, OHIO	13,000	10,100	------	12,000	------	------	11,300
COLORADO SPRINGS	------	------	------	------	------	------	------
COLUMBIA, S.C	------	------	------	------	------	------	------
COLUMBUS, GA.-ALA	------	------	------	------	------	------	------
COLUMBUS, OHIO	10,600	10,000	12,000	12,000	11,300	------	10,000
CORPUS CHRISTI, TEX	------	------	------	------	------	------	------
DALLAS, TEX	12,000	10,000	10,800	12,500	------	------	12,000
DAVENPORT-ROCK ISLAND-MOLINE, IOWA-ILL	------	------	------	------	------	------	------
DAYTON, OHIO	9,500	11,500	------	------	------	------	11,200
DECATUR, ILL	------	------	------	------	------	------	------
DENVER, COLO	11,700	10,400	------	10,400	------	------	10,600
DES MOINES, IOWA	------	9,400	------	------	------	------	------
DETROIT, MICH	10,800	10,000	------	11,800	------	------	11,200
DUBUQUE, IOWA	------	------	------	------	------	------	------
DULUTH-SUPERIOR, MINN.-WIS	------	------	------	------	------	------	------
DURHAM, N.C	13,000	11,000	------	------	------	------	------
EL PASO, TEX	------	------	------	------	------	------	------
ERIE, PA	------	------	------	------	------	------	------
EUGENE, OREG	------	10,000	------	------	------	------	------
EVANSVILLE, IND.-KY	11,000	------	------	------	------	------	------
FALL RIVER, MASS.-R.I	------	------	------	------	------	------	------
FARGO-MOORHEAD, N.DAK.-MINN	10,300	------	------	------	------	------	------
FITCHBURG-LEOMINSTER, MASS	------	------	------	------	------	------	------
FLINT, MICH	------	------	------	------	------	------	------
FORT LAUDERDALE-HOLLYWOOD, FLA	------	------	------	------	------	------	------
FORT SMITH, ARK.-OKLA	------	------	------	------	------	------	------
FORT WAYNE, IND	------	------	------	------	------	------	------
FORT WORTH, TEX	------	9,400	------	------	------	------	10,800
FRESNO, CALIF	9,900	------	------	------	------	------	------
GADSDEN, ALA	------	------	------	------	------	------	------
GALVESTON-TEXAS CITY, TEX	11,500	------	------	------	------	------	10,600
GARY-HAMMOND-EAST CHICAGO, IND	------	------	------	------	------	------	11,500
GRAND RAPIDS, MICH	------	------	------	------	------	------	------
GREAT FALLS, MONT	------	------	------	------	------	------	------
GREEN BAY, WIS	------	------	------	------	------	------	------
GREENSBORO-HIGH POINT, N.C	------	------	------	------	------	------	------
GREENVILLE, S.C	------	------	------	------	------	------	------
HAMILTON-MIDDLETOWN, OHIO	------	------	------	------	------	------	------
HARRISBURG, PA	------	------	------	------	------	------	------
HARTFORD, CONN	12,000	10,200	------	10,500	------	------	9,600
HONOLULU, HAWAII	10,000	10,600	------	11,000	------	------	10,300
HOUSTON, TEX	12,000	10,500	------	13,500	------	------	13,000
HUNTINGTON-ASHLAND, W.VA.-KY.-OHIO	------	------	------	------	------	------	------
HUNTSVILLE, ALA	------	------	------	------	------	------	12,100
INDIANAPOLIS, IND	11,400	9,800	------	------	------	------	10,000
JACKSON, MICH	------	------	------	------	------	------	------
JACKSON, MISS	11,500	------	------	------	------	------	------
JACKSONVILLE, FLA	------	------	------	------	------	------	------
JERSEY CITY, N.J	11,000	10,500	------	------	------	------	10,700
JOHNSTOWN, PA	------	------	------	------	------	------	------

TABLE A-29.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND FIELD, 1964—CONTINUED

LOCATION	TOTAL	SCIENTIFIC AND TECHNICAL FIELD					
		CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES
STANDARD METROPOLITAN STATISTICAL AREAS CONTINUED							
KALAMAZOO, MICH	12,000	12,500	------	------	------	------	------
KANSAS CITY, MO.-KANS	10,300	10,000	------	10,700	8,100	10,000	------
KENOSHA, WIS	------	------	------	------	------	------	------
KNOXVILLE, TENN	12,000	12,000	10,200	------	13,000	9,500	10,500
LAFAYETTE, LA	9,900	------	10,000	------	------	------	------
LAKE CHARLES, LA	9,600	10,000	------	------	------	------	------
LANCASTER, PA	10,800	11,500	------	------	10,200	------	------
LANSING, MICH	11,000	10,000	10,200	------	10,500	10,000	11,000
LAREDO, TEX	------	------	------	------	------	------	------
LAS VEGAS, NEV	10,000	9,600	------	------	------	------	------
LAWRENCE-HAVERHILL, MASS.-N.H	10,100	------	------	------	------	------	------
LAWTON, OKLA	------	------	------	------	------	------	------
LEWISTON-AUBURN, MAINE	------	------	------	------	------	------	------
LEXINGTON, KY	10,800	10,500	10,000	------	------	------	10,400
LIMA, OHIO	8,500	------	------	------	------	------	------
LINCOLN, NEBR	9,700	9,600	------	------	------	8,600	10,000
LITTLE ROCK-NORTH LITTLE ROCK, ARK	10,500	10,800	------	------	------	------	------
LORAINE-ELYRIA, OHIO	10,000	10,500	------	------	------	------	------
LOS ANGELES-LONG BEACH, CALIF	12,500	11,800	11,000	11,300	14,000	13,000	12,000
LOUISVILLE, KY.-IND	10,500	10,800	------	------	------	------	------
LOWELL, MASS	10,000	10,800	------	------	------	------	------
LUBBOCK, TEX	9,300	------	9,200	------	------	------	------
LYNCHBURG, VA	9,600	------	------	------	11,200	------	------
MACON, GA	8,600	------	------	------	------	------	------
MADISON, WIS	10,500	10,000	10,000	------	10,000	10,200	11,000
MANCHESTER, N.H	------	------	------	------	------	------	------
MAYAGUEZ, P.R	9,600	------	------	------	------	------	------
MEMPHIS, TENN.-ARK	10,100	10,000	------	------	------	------	------
MERIDEN, CONN	------	------	------	------	------	------	------
MIAMI, FLA	10,000	9,500	9,800	11,000	------	------	------
MIDLAND, TEX	10,600	------	10,600	------	------	------	------
MILWAUKEE, WIS	10,000	10,000	------	------	9,600	10,200	10,600
MINNEAPOLIS-ST.PAUL, MINN	11,000	11,500	9,200	10,400	11,400	11,500	10,300
MOBILE, ALA	10,100	9,800	------	------	------	------	------
MONROF, LA	8,400	------	------	------	------	------	------
MONTGOMERY, ALA	8,700	------	------	------	------	------	------
MUNCIE, IND	8,800	------	------	------	------	------	------
MUSKEGON-MUSKEGON HEIGHTS, MICH	10,700	11,500	------	------	------	------	------
NASHVILLE, TENN	10,000	9,900	------	------	10,000	10,000	------
NEW BEDFORD, MASS	------	------	------	------	------	------	------
NEW BRITAIN, CONN	9,000	------	------	------	------	------	------
NEW HAVEN, CONN	10,300	11,000	9,000	------	9,000	10,000	------
NEW LONDON-GROTON-NORWICH, CONN	11,000	12,000	------	------	9,800	------	------
NEW ORLEANS, LA	10,300	9,800	10,900	------	9,000	10,800	------
NEW YORK, N.Y	12,000	12,000	10,500	10,500	12,000	12,500	11,000
NEWARK, N.J	12,100	12,000	------	------	14,400	13,500	------
NEWPORT NEWS-HAMPTON, VA	10,300	------	------	------	9,800	------	------
NORFOLK-PORTSMOUTH, VA	9,000	10,000	------	------	------	------	------
NORWALK, CONN	12,200	11,500	------	------	13,700	------	------
ODESSA, TEX	10,000	9,600	------	------	------	------	------
OGDEN, UTAH	9,600	------	------	------	------	------	10,900
OKLAHOMA CITY, OKLA	10,200	9,800	10,600	10,000	9,300	8,900	------
OMAHA, NEBR.-IOWA	10,500	8,400	------	------	------	12,100	------
ORLANDO, FLA	11,000	10,900	------	------	11,100	13,000	------
PATERSON-CLIFTON-PASSAIC, N.J	11,300	11,400	------	------	10,000	12,500	------
PENSACOLA, FLA	10,000	10,800	------	------	------	------	------
PEORIA, ILL	10,300	10,600	------	------	------	------	------
PHILADELPHIA, PA.-N.J	11,300	11,200	9,300	11,000	11,300	12,500	10,600
PHOENIX, ARIZ	10,000	8,700	10,300	------	10,800	11,000	9,300
PITTSBURGH, PA	11,900	11,400	11,500	------	13,100	11,500	------
PITTSFIELD, MASS	11,600	12,400	------	------	------	------	------
PONCE, P.R	------	------	------	------	------	------	------
PORTLAND, MAINE	8,000	------	------	------	------	------	------
PORTLAND, OREG.-WASH	10,000	10,000	9,800	------	8,200	9,800	10,300
PROVIDENCE-PAWTUCKET-WARWICK, R.I.-MASS	9,600	10,000	------	------	9,500	9,000	------
PROVO-OREM, UTAH	8,800	------	------	------	------	------	------
PUEBLO, COLO	8,400	------	------	------	------	------	------
RACINE, WIS	10,000	10,000	------	------	------	------	------
RALEIGH, N.C	10,000	10,000	------	------	12,000	10,300	9,600
READING, PA	9,000	8,800	------	------	------	------	------
RENO, NEV	9,800	------	10,800	------	------	------	------
RICHMOND, VA	10,600	11,000	------	------	------	------	------
ROANOKE, VA	9,400	------	------	------	------	------	------
ROCHESTER, N.Y	12,000	12,400	------	------	12,500	10,000	------
ROCKFORD, ILL	9,800	------	------	------	------	------	------
SACRAMENTO, CALIF	11,000	11,000	10,200	------	10,500	9,900	11,500
SAGINAW, MICH	------	------	------	------	------	------	------
ST.JOSEPH, MO	------	------	------	------	------	------	------
ST.LOUIS, MO.-ILL	11,200	12,000	9,000	10,600	10,000	10,700	------
SALT LAKE CITY, UTAH	10,100	10,000	10,100	11,000	10,000	10,000	9,100
SAN ANGELO, TEX	------	------	------	------	------	------	------
SAN ANTONIO, TEX	10,000	9,600	10,500	------	9,900	8,700	------
SAN BERNARDINO-RIVERSIDE-ONTARIO, CALIF	10,800	10,300	9,900	------	11,700	10,600	11,000
SAN DIEGO, CALIF	10,900	10,500	10,300	------	12,000	10,900	------
SAN FRANCISCO-OAKLAND, CALIF	12,000	12,000	12,000	11,300	12,600	11,100	12,000
SAN JOSE, CALIF	12,600	12,000	11,300	11,500	13,700	12,000	------
SAN JUAN, P.R	9,500	8,000	------	------	------	------	------
SANTA BARBARA, CALIF	12,200	10,600	11,000	------	14,300	12,500	------
SAVANNAH, GA	9,400	10,000	------	------	------	------	------
SCRANTON, PA	8,300	------	------	------	------	------	------
SEATTLE-EVERETT, WASH	11,000	10,200	10,600	11,000	11,600	11,700	10,000

TABLE A-29.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND FIELD, 1964—CONTINUED

LOCATION	SCIENTIFIC AND TECHNICAL FIELD						
	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELDS
STANDARD METROPOLITAN STATISTICAL AREAS CONTINUED							
KALAMAZOO, MICH	13,000	------	------	------	------	------	------
KANSAS CITY, MO.-KANS	11,500	10,000	------	12,900	------	------	10,000
KENOSHA, WIS	------	------	------	------	------	------	------
KNOXVILLE, TENN	11,000	10,000	------	10,600	------	------	12,000
LAFAYETTE, LA	------	------	------	------	------	------	------
LAKE CHARLES, LA	------	------	------	------	------	------	------
LANCASTER, PA	------	------	------	------	------	------	9,800
LANSING, MICH	11,000	11,300	------	12,500	12,900	------	10,000
LAREDO, TEX	------	------	------	------	------	------	------
LAS VEGAS, NEV	------	------	------	------	------	------	------
LAWRENCE-HAVERHILL, MASS.-N.H	------	------	------	------	------	------	------
LAWTON, OKLA	------	------	------	------	------	------	------
LEWISTON-AUBURN, MAINE	------	------	------	------	------	------	------
LEXINGTON, KY	11,700	10,600	------	10,800	------	------	------
LIMA, OHIO	------	------	------	------	------	------	------
LINCOLN, NEBR	10,000	9,800	------	10,000	------	------	------
LITTLE ROCK-NORTH LITTLE ROCK, ARK	13,000	------	------	------	------	------	------
LORAINE-ELYRIA, OHIO	------	------	------	------	------	------	------
LOS ANGELES-LONG BEACH, CALIF	12,000	12,000	13,400	13,000	10,400	9,400	13,200
LOUISVILLE, KY.-IND	12,000	------	------	------	------	------	9,800
LOWELL, MASS	------	------	------	------	------	------	------
LUBBOCK, TEX	------	------	------	------	------	------	------
LYNCHBURG, VA	------	------	------	------	------	------	------
MACON, GA	------	------	------	------	------	------	------
MADISON, WIS	11,400	10,600	------	12,000	9,600	------	9,800
MANCHESTER, N.H	------	------	------	------	------	------	------
MAYAGUEZ, P.R	------	------	------	------	------	------	------
MEMPHIS, TENN.-ARK	12,900	9,300	------	------	------	------	------
MERIDEN, CONN	------	------	------	------	------	------	------
MIAMI, FLA	9,700	10,000	------	------	------	------	8,100
MIDLAND, TEX	------	------	------	------	------	------	------
MILWAUKEE, WIS	10,300	9,900	------	10,800	------	------	9,700
MINNEAPOLIS-ST.PAUL, MINN	11,300	10,900	10,600	11,500	11,000	------	10,800
MOBILE, ALA	------	------	------	------	------	------	------
MONROE, LA	------	------	------	------	------	------	------
MONTGOMERY, ALA	------	------	------	------	------	------	------
MUNCIE, IND	------	------	------	------	------	------	------
MUSKEGON-MUSKEGON HEIGHTS, MICH	------	------	------	------	------	------	------
NASHVILLE, TENN	12,000	9,600	------	------	------	------	9,000
NEW BEDFORD, MASS	------	------	------	------	------	------	------
NEW BRITAIN, CONN	------	------	------	------	------	------	------
NEW HAVEN, CONN	11,000	9,800	------	10,500	------	------	9,600
NEW LONDON-GROTON-NORWICH, CONN	12,800	9,300	------	------	------	------	10,000
NEW ORLEANS, LA	11,000	9,800	------	9,700	------	------	11,200
NEW YORK, N.Y	12,000	11,000	11,600	14,200	11,000	9,500	12,400
NEWARK, N.J	12,600	10,700	11,700	12,500	------	------	12,000
NEWPORT NEWS-HAMPTON, VA	------	------	------	------	------	------	------
NORFOLK-PORTSMOUTH, VA	------	------	------	------	------	------	------
NORWALK, CONN	------	------	------	------	------	------	------
ODESSA, TEX	------	------	------	------	------	------	------
OGDEN, UTAH	------	------	------	------	------	------	------
OKLAHOMA CITY, OKLA	11,000	11,100	------	------	------	------	10,000
OMAHA, NEBR.-IOWA	12,000	10,300	------	------	------	------	------
ORLANDO, FLA	10,000	------	------	------	------	------	10,700
PATERSON-CLIFTON-PASSAIC, N.J	11,300	9,800	------	12,000	------	------	11,400
PENSACOLA, FLA	------	------	------	------	------	------	------
PEORIA, ILL	------	------	------	------	------	------	------
PHILADELPHIA, PA.-N.J	12,000	10,000	11,000	12,500	9,600	9,500	11,500
PHOENIX, ARIZ	8,600	10,000	------	9,900	------	------	9,600
PITTSBURGH, PA	12,000	11,000	11,000	12,500	12,000	------	12,000
PITTSFIELD, MASS	------	------	------	------	------	------	------
PONCE, P.R	------	------	------	------	------	------	------
PORTLAND, MAINE	------	------	------	------	------	------	------
PORTLAND, OREG.-WASH	11,000	10,400	------	9,600	------	------	9,500
PROVIDENCE-PAWTUCKET-WARWICK, R.I.-MASS	8,800	9,300	------	12,000	------	------	9,700
PROVO-OREM, UTAH	------	------	------	------	------	------	------
PUEBLO, COLO	------	------	------	------	------	------	------
RACINE, WIS	------	------	------	------	------	------	------
RALEIGH, N.C	10,400	9,200	------	9,500	------	------	------
READING, PA	------	------	------	------	------	------	------
RENO, NEV	------	------	------	------	------	------	------
RICHMOND, VA	12,000	9,400	------	10,600	------	------	11,000
ROANOKE, VA	------	------	------	------	------	------	------
ROCHESTER, N.Y	12,000	9,700	11,300	12,200	------	------	11,200
ROCKFORD, ILL	------	------	------	------	------	------	------
SACRAMENTO, CALIF	11,000	11,800	------	12,000	------	------	11,100
SAGINAW, MICH	------	------	------	------	------	------	------
ST.JOSEPH, MO	------	------	------	------	------	------	------
ST.LOUIS, MO.-ILL	12,500	10,000	------	12,000	10,500	------	10,700
SALT LAKE CITY, UTAH	11,000	8,800	------	------	------	------	11,000
SAN ANGELO, TEX	------	------	------	------	------	------	------
SAN ANTONIO, TEX	12,100	11,000	------	------	------	------	9,000
SAN BERNARDINO-RIVERSIDE-ONTARIO, CALIF	10,500	10,300	------	------	------	------	14,000
SAN DIEGO, CALIF	9,500	10,900	------	11,500	------	------	12,000
SAN FRANCISCO-OAKLAND, CALIF	11,400	11,000	11,500	13,000	11,500	9,900	12,000
SAN JOSE, CALIF	12,000	11,400	12,000	13,700	------	------	13,600
SAN JUAN, P.R	11,000	------	------	------	------	------	------
SANTA BARBARA, CALIF	11,000	10,700	------	------	------	------	14,000
SAVANNAH, GA	------	------	------	------	------	------	------
SCRANTON, PA	------	------	------	------	------	------	------
SEATTLE-EVERETT, WASH	12,000	10,100	------	12,000	------	------	10,800

TABLE A-29.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND FIELD, 1964—CONTINUED

LOCATION	TOTAL	SCIENTIFIC AND TECHNICAL FIELD					
		CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSECS	MATHEMATICS	AGRICULTURAL SCIENCES
STANDARD METROPOLITAN STATISTICAL AREAS CONTINUED							
SHREVEPORT, LA	10,000	8,800	10,000	------	------	------	------
SIOUX CITY, IOWA-NEB	------	------	------	------	------	------	------
SIOUX FALLS, S.DAK	7,900	------	------	------	------	------	------
SOUTH BEND, IND	9,700	10,000	------	------	9,800	9,300	------
SPOKANE, WASH	8,600	9,000	------	------	------	------	------
SPRINGFIELD, ILL	9,900	------	------	------	------	------	------
SPRINGFIELD, MO	8,800	------	------	------	------	------	------
SPRINGFIELD, OHIO	9,300	------	------	------	------	------	------
SPRINGFIELD-CHICOPEE-HOLYOKE, MASS.-CONN	10,900	12,000	------	------	------	11,100	------
STAMFORD, CONN	12,700	12,100	------	------	14,700	------	------
STEUBENVILLE-WEIRTON, OHIO-W.VA	------	------	------	------	------	------	------
STOCKTON, CALIF	9,000	------	------	------	------	------	------
SYRACUSE, N.Y	11,200	11,000	9,000	------	12,500	11,000	------
TACOMA, WASH	9,000	8,400	------	------	------	------	------
TAMPA-ST.PETERSBURG, FLA	9,500	9,000	------	------	10,500	9,900	------
TERRE HAUTE, IND	9,500	9,200	------	------	------	------	------
TEXARKANA, TEX.-ARK	------	------	------	------	------	------	------
TOLEDO, OHIO-MICH	10,200	10,200	------	------	11,000	------	------
TOPEKA, KANS	9,700	------	------	------	------	------	------
TRENTON, N.J	12,000	12,000	9,400	------	13,400	12,000	------
TUCSON, ARIZ	10,000	8,000	9,500	------	10,500	8,800	10,000
TULSA, OKLA	11,700	11,000	12,000	------	11,500	11,600	------
TUSCALOOSA, ALA	9,600	------	------	------	------	------	------
TYLER, TEX	10,000	------	10,200	------	------	------	------
UTICA-ROME, N.Y	9,500	------	------	------	9,500	------	------
VALLEJO-NAPA, CALIF	9,900	------	------	------	------	------	------
WACO, TEX	9,800	------	------	------	------	------	------
WASHINGTON, D.C.-MD.-VA	12,600	11,800	11,700	12,100	12,500	13,600	13,300
WATERBURY, CONN	10,600	11,000	------	------	------	------	------
WATERLOO, IOWA	9,200	------	------	------	------	------	------
WEST PALM BEACH, FLA	10,600	------	------	------	------	------	------
WHEELING, W.VA.-OHIO	9,000	------	------	------	------	------	------
WICHITA, KANS	10,000	9,500	10,000	------	------	8,500	------
WICHITA FALLS, TEX	------	------	------	------	------	------	------
WILKES-BARRE-HAZLETON, PA	7,800	------	------	------	------	------	------
WILMINGTON, DEL.-N.J.-MD	13,500	13,900	------	------	14,000	11,400	------
WINSTON-SALEM, N.C	10,400	11,300	------	------	------	------	------
WORCESTER, MASS	10,000	10,300	------	------	9,200	10,000	------
YORK, PA	9,200	8,700	------	------	------	------	------
YOUNGSTOWN-WARREN, OHIO	8,700	9,800	------	------	------	------	------
OTHER LOCATICNS	10,000	10,500	10,000	10,000	10,300	9,200	8,700

TABLE A-29.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND FIELD, 1964—CONTINUED

LOCATION	SCIENTIFIC AND TECHNICAL FIELD						
	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELDS
STANDARD METROPOLITAN STATISTICAL AREAS CONTINUED							
SHREVEPORT, LA	------	------	------	------	------	------	------
SIOUX CITY, IOWA-NEB	------	------	------	------	------	------	------
SIOUX FALLS, S.DAK	------	------	------	------	------	------	------
SOUTH BEND, IND	------	------	------	------	------	------	------
SPOKANE, WASH	------	------	------	------	------	------	------
SPRINGFIELD, ILL	------	------	------	------	------	------	------
SPRINGFIELD, MO	------	------	------	------	------	------	------
SPRINGFIELD, OHIO	------	------	------	------	------	------	------
SPRINGFIELD-CHICOPEE-HOLYOKE, MASS.-CONN	------	10,000	------	------	------	------	10,000
STAMFORD, CONN	------	------	------	------	------	------	11,700
STEUBENVILLE-WEIRTON, OHIO-W.VA	------	------	------	------	------	------	------
STOCKTON, CALIF	------	------	------	------	------	------	------
SYRACUSE, N.Y	13,000	10,700	------	9,600	------	------	11,000
TACOMA, WASH	------	9,800	------	------	------	------	------
TAMPA-ST.PETERSBURG, FLA	8,700	9,500	------	------	------	------	8,500
TERRE HAUTE, IND	10,500	------	------	------	------	------	------
TEXARKANA, TEX.-ARK	------	------	------	------	------	------	------
TOLEDO, OHIO-MICH	------	8,700	------	------	------	------	10,500
TOPEKA, KANS	------	12,000	------	------	------	------	------
TRENTON, N.J	11,600	10,800	------	10,800	------	------	12,200
TUCSON, ARIZ	10,400	10,000	------	10,500	------	------	12,600
TULSA, OKLA	------	------	------	------	------	------	12,600
TUSCALOOSA, ALA	------	------	------	------	------	------	------
TYLER, TEX	------	------	------	------	------	------	------
UTICA-ROME, N.Y	------	------	------	------	------	------	------
VALLEJO-NAPA, CALIF	------	------	------	------	------	------	------
WACO, TEX	------	------	------	------	------	------	------
WASHINGTON, D.C.-MD.-VA	12,500	12,500	14,000	14,500	13,500	10,000	14,000
WATERBURY, CONN	------	------	------	------	------	------	10,200
WATERLOO, IOWA	------	------	------	------	------	------	------
WEST PALM BEACH, FLA	------	------	------	------	------	------	------
WHEELING, W.VA.-OHIO	------	------	------	------	------	------	------
WICHITA, KANS	------	11,000	------	------	------	------	------
WICHITA FALLS, TEX	------	------	------	------	------	------	------
WILKES-BARRE-HAZLETON, PA	------	------	------	------	------	------	------
WILMINGTON, DEL.-N.J.-MD	12,000	10,600	------	15,500	------	------	12,900
WINSTON-SALEM, N.C	10,300	------	------	------	------	------	------
WORCESTER, MASS	9,500	10,300	------	------	------	------	------
YORK, PA	------	------	------	------	------	------	------
YOUNGSTOWN-WARREN, OHIO	------	------	------	------	------	------	------
OTHER LOCATIONS	9,700	9,600	11,000	10,800	9,800	8,000	10,000

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-30.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND HIGHEST DEGREE, 1964

LOCATION	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ALL LOCATIONS	11,000	12,000	15,500	10,000	10,000	10,300	10,800
STANDARD METROPOLITAN STATISTICAL AREAS	11,300	12,500	15,500	10,400	10,300	10,500	11,000
ABILENE, TEX	9,000	------	------	7,300	10,000	------	------
AKRON, OHIO	11,000	12,300	------	10,100	10,200	------	------
ALBANY, GA	------	------	------	------	------	------	------
ALBANY-SCHENECTADY-TROY, N.Y	12,000	14,000	16,800	9,900	10,000	------	------
ALBUQUERQUE, N.MEX	12,300	13,200	------	11,200	11,300	------	------
ALLENTOWN-BETHLEHEM-EASTON, PA.-N.J	10,200	11,400	------	10,000	9,200	------	------
ALTOONA, PA	------	------	------	------	------	------	------
AMARILLO, TEX	9,600	9,900	------	8,500	10,200	------	------
ANAHEIM-SANTA ANA-GARDEN GROVE, CALIF	12,800	15,400	------	12,500	11,600	------	------
ANN ARBOR, MICH	11,600	12,000	16,500	9,500	9,000	------	------
ASHEVILLE, N.C	9,600	12,000	------	9,000	9,800	------	------
ATLANTA, GA	10,100	11,000	15,500	9,400	10,000	------	------
ATLANTIC CITY, N.J	12,100	------	------	------	------	------	------
AUGUSTA, GA.-S.C	11,100	13,000	------	10,500	10,000	------	------
AUSTIN, TEX	9,600	10,500	------	8,000	8,400	------	------
BAKERSFIELD, CALIF	10,500	------	------	10,100	10,800	------	------
BALTIMORE, MD	11,000	12,500	13,500	10,200	10,000	------	------
BATON ROUGE, LA	11,000	11,800	------	10,600	10,000	------	------
BAY CITY, MICH	11,000	11,600	------	------	------	------	------
BEAUMONT-PORT ARTHUR, TEX	10,500	12,300	------	11,000	9,800	------	------
BILLINGS, MONT	9,700	------	------	9,300	10,600	------	------
BINGHAMTON, N.Y.-PA	11,800	12,300	------	11,500	10,600	------	------
BIRMINGHAM, ALA	11,300	12,500	18,000	9,400	8,900	------	------
BOISE CITY, IDAHO	------	------	------	------	------	------	------
BOSTON, MASS	11,500	12,000	12,500	11,000	10,600	10,600	10,000
BRIDGEPORT, CONN	10,000	10,000	------	10,000	10,000	------	------
BROCKTON, MASS	9,800	------	------	------	------	------	------
BROWNSVILLE-HARLINGEN-SAN BENITO, TEX	9,300	------	------	------	------	------	------
BUFFALO, N.Y	10,800	12,300	15,200	10,000	9,500	------	------
CANTON, OHIO	9,700	------	------	8,200	10,000	------	------
CEDAR RAPIDS, IOWA	9,600	10,200	------	8,900	9,600	------	------
CHAMPAIGN-URBANA, ILL	11,000	11,500	------	10,200	9,000	------	------
CHARLESTON, S.C	9,800	10,000	------	7,600	9,800	------	------
CHARLESTON, W.VA	11,000	13,500	------	10,000	9,800	------	------
CHARLOTTE, N.C	10,000	10,600	------	8,500	10,600	------	------
CHATTANOOGA, TENN.-GA	9,700	12,000	------	8,200	9,200	------	------
CHICAGO, ILL	11,200	12,800	18,000	10,000	10,000	10,500	10,800
CINCINNATI, OHIO-KY.-IND	10,700	12,500	15,500	9,800	9,800	------	------
CLEVELAND, OHIO	11,000	12,700	16,000	10,300	10,000	------	------
COLORADO SPRINGS	10,300	10,500	------	9,000	10,600	------	------
COLUMBIA, S.C	9,800	10,000	------	8,300	9,800	------	------
COLUMBUS, GA.-ALA	10,600	------	------	------	------	------	------
COLUMBUS, OHIO	11,000	11,900	14,500	9,800	10,000	------	------
CORPUS CHRISTI, TEX	10,000	11,800	------	9,800	9,800	------	------
DALLAS, TEX	11,700	13,000	15,000	11,000	10,800	------	------
DAVENPORT-ROCK ISLAND-MOLINE, IOWA-ILL	9,200	------	------	8,200	9,800	------	------
DAYTON, OHIO	11,000	12,700	------	10,600	10,300	------	------
DECATUR, ILL	10,800	12,000	------	8,400	10,000	------	------
DENVER, COLO	11,000	12,000	15,000	10,300	10,300	------	------
DES MOINES, IOWA	10,000	10,500	------	9,000	11,000	------	------
DETROIT, MICH	10,900	12,000	18,000	10,000	10,000	12,000	10,200
DUBUQUE, IOWA	7,900	------	------	------	------	------	------
DULUTH-SUPERIOR, MINN.-WIS	8,400	9,700	------	8,000	7,500	------	------
DURHAM, N.C	12,000	12,300	15,000	10,500	9,300	------	------
EL PASO, TEX	9,600	10,300	------	8,200	9,300	------	------
ERIE, PA	10,000	11,500	------	8,500	9,600	------	------
EUGENE, OREG	9,300	10,500	------	------	7,500	------	------
EVANSVILLE, IND.-KY	10,000	13,000	------	8,800	9,000	------	------
FALL RIVER, MASS.-R.I	------	------	------	------	------	------	------
FARGO-MOORHEAD, N.DAK.-MINN	9,000	9,900	------	8,000	------	------	------
FITCHBURG-LEOMINSTER, MASS	10,000	------	------	------	------	------	------
FLINT, MICH	9,900	10,800	------	9,100	------	------	------
FORT LAUDERDALE-HOLLYWOOD, FLA	10,300	------	------	------	------	------	------
FORT SMITH, ARK.-OKLA	------	------	------	------	------	------	------
FORT WAYNE, IND	9,800	9,200	------	8,500	10,700	------	------
FORT WORTH, TEX	10,800	11,400	------	10,000	11,000	------	------
FRESNO, CALIF	9,800	10,000	------	8,900	9,800	------	------
GADSDEN, ALA	------	------	------	------	------	------	------
GALVESTON-TEXAS CITY, TEX	11,500	12,600	------	11,000	10,500	------	------
GARY-HAMMOND-EAST CHICAGO, IND	12,100	14,000	------	11,500	11,000	------	------
GRAND RAPIDS, MICH	9,000	9,300	------	7,700	9,500	------	------
GREAT FALLS, MONT	9,600	------	------	------	------	------	------
GREEN BAY, WIS	9,000	------	------	------	------	------	------
GREENSBORO-HIGH POINT, N.C	9,200	9,500	------	8,300	8,100	------	------
GREENVILLE, S.C	8,000	------	------	------	9,500	------	------
HAMILTON-MIDDLETOWN, OHIO	9,600	10,000	------	7,500	10,000	------	------
HARRISBURG, PA	9,300	10,000	------	8,500	9,000	------	------
HARTFORD, CONN	10,900	13,000	------	10,500	10,400	------	------
HONOLULU, HAWAII	10,300	11,100	------	9,600	9,000	------	------
HOUSTON, TEX	12,000	13,000	15,000	11,300	10,800	12,000	13,900
HUNTINGTON-ASHLAND, W.VA.-KY.-OHIO	9,000	10,000	------	------	8,700	------	------
HUNTSVILLE, ALA	11,700	14,500	------	11,800	10,300	------	------
INDIANAPOLIS, IND	10,500	12,600	17,800	9,600	9,800	------	------
JACKSON, MICH	9,300	------	------	------	------	------	------
JACKSON, MISS	10,100	10,300	------	9,700	10,100	------	------
JACKSONVILLE, FLA	9,800	------	------	9,100	9,000	------	------
JERSEY CITY, N.J	10,800	11,900	------	10,300	10,000	------	------
JOHNSTOWN, PA	7,700	------	------	------	------	------	------

TABLE A-30.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND HIGHEST DEGREE, 1964—CONTINUED

LOCATION	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
STANDARD METROPOLITAN STATISTICAL AREAS - CONTINUED							
KALAMAZOO, MICH	12,000	12,800	------	10,500	10,800	------	------
KANSAS CITY, MO.-KANS	10,300	11,600	18,500	9,400	9,600	------	------
KENOSHA, WIS	------	------	------	------	------	------	------
KNOXVILLE, TENN	12,000	12,500	------	11,000	11,100	------	------
LAFAYETTE, LA	9,900	------	------	9,400	10,200	------	------
LAKE CHARLES, LA	9,600	------	------	8,500	10,000	------	------
LANCASTER, PA	10,800	11,500	------	11,000	9,900	------	------
LANSING, MICH	11,000	11,600	------	8,700	9,200	------	------
LAREDO, TEX	------	------	------	------	------	------	------
LAS VEGAS, NEV	10,000	------	------	10,300	9,800	------	------
LAWRENCE-HAVERHILL, MASS.-N.H	10,100	------	------	8,500	10,600	------	------
LAWTON, OKLA	------	------	------	------	------	------	------
LEWISTON-AUBURN, MAINE	------	------	------	------	------	------	------
LEXINGTON, KY	10,800	11,000	15,500	8,600	7,900	------	------
LIMA, OHIO	8,500	------	------	------	------	------	------
LINCOLN, NEBR	9,700	10,200	------	7,500	9,500	------	------
LITTLE ROCK-NORTH LITTLE ROCK, ARK	10,500	11,300	------	8,400	9,300	------	------
LORAINE-ELYRIA, OHIO	10,000	11,000	------	------	10,000	------	------
LOS ANGELES-LONG BEACH, CALIF	12,500	14,000	16,500	12,000	11,700	------	------
LOUISVILLE, KY.-IND	10,500	12,000	------	9,000	9,500	11,400	12,000
LOWELL, MASS	10,000	------	------	9,300	9,800	------	------
LUBBOCK, TEX	9,300	9,500	------	8,700	------	------	------
LYNCHBURG, VA	9,600	8,600	------	------	------	------	------
MACON, GA	8,600	------	------	------	------	------	------
MADISON, WIS	10,500	11,300	14,000	9,300	8,600	------	------
MANCHESTER, N.H	------	------	------	------	------	------	------
MAYAGUEZ, P.R	9,600	10,200	------	------	------	------	------
MEMPHIS, TENN.-ARK	10,100	11,100	17,700	7,500	9,300	------	------
MERIDEN, CONN	------	------	------	------	------	------	------
MIAMI, FLA	10,000	10,200	16,300	8,000	9,800	------	------
MIDLAND, TEX	10,600	------	------	10,000	11,000	------	------
MILWAUKEE, WIS	10,000	11,000	------	9,300	9,300	------	------
MINNEAPOLIS-ST.PAUL, MINN	11,000	12,300	14,000	10,000	10,000	------	------
MOBILE, ALA	10,100	------	------	------	9,800	------	------
MONROE, LA	8,400	------	------	------	8,400	------	------
MONTGOMERY, ALA	8,700	------	------	------	------	------	------
MUNCIE, IND	8,800	10,000	------	7,800	------	------	------
MUSKEGON-MUSKEGON HEIGHTS, MICH	10,700	------	------	------	10,700	------	------
NASHVILLE, TENN	10,000	10,500	16,000	8,000	9,000	------	------
NEW BEDFORD, MASS	------	------	------	------	------	------	------
NEW BRITAIN, CONN	9,000	------	------	------	------	------	------
NEW HAVEN, CONN	10,300	10,500	14,000	9,300	10,000	------	------
NEW LONDON-GROTON-NORWICH, CONN	11,000	12,300	------	10,000	9,500	------	------
NEW ORLEANS, LA	10,300	10,300	17,400	10,000	10,300	------	------
NEW YORK, N.Y	12,000	13,000	15,500	11,000	11,000	------	------
NEWARK, N.J	12,100	14,400	19,500	11,000	10,200	10,900	12,000
NEWPORT NEWS-HAMPTON, VA	10,300	------	------	9,800	10,000	10,000	11,000
NORFOLK-PORTSMOUTH, VA	9,000	8,700	------	8,100	10,000	------	------
NORWALK, CONN	12,200	14,700	------	12,200	10,000	------	------
ODESSA, TEX	10,000	------	------	------	9,500	------	------
OGDEN, UTAH	9,600	------	------	8,900	10,900	------	------
OKLAHOMA CITY, OKLA	10,200	10,600	14,000	9,500	10,200	------	------
OMAHA, NEBR.-IOWA	10,500	10,600	------	8,400	10,300	------	------
ORLANDO, FLA	11,000	14,000	------	10,600	10,000	------	------
PATERSON-CLIFTON-PASSAIC, N.J	11,300	13,700	------	10,300	10,200	------	------
PENSACOLA, FLA	10,000	------	------	------	9,500	------	------
PEORIA, ILL	10,300	12,100	------	9,500	9,500	------	------
PHILADELPHIA, PA.-N.J	11,300	12,600	15,000	10,300	10,200	11,000	10,300
PHOENIX, ARIZ	10,000	10,300	------	8,700	10,000	------	------
PITTSBURGH, PA	11,900	13,000	19,300	11,100	10,200	------	------
PITTSFIELD, MASS	11,600	15,500	------	10,800	10,200	------	------
PONCE, P.R	------	------	------	------	------	------	------
PORTLAND, MAINE	8,000	------	------	------	8,400	------	------
PORTLAND, OREG.-WASH	10,000	10,700	17,000	8,900	9,600	------	------
PROVIDENCE-PAWTUCKET-WARWICK, R.I.-MASS	9,600	10,000	------	8,500	10,000	------	------
PROVO-OREM, UTAH	8,800	9,000	------	7,800	------	------	------
PUEBLO, COLO	8,400	------	------	------	------	------	------
RACINE, WIS	10,000	------	------	9,200	9,500	------	------
RALEIGH, N.C	10,000	10,600	------	8,600	8,500	------	------
READING, PA	9,000	10,000	------	------	8,500	------	------
RENO, NEV	9,800	11,400	------	8,400	8,600	------	------
RICHMOND, VA	10,600	12,300	14,000	9,400	9,500	------	------
ROANOKE, VA	9,400	------	------	------	------	------	------
ROCHESTER, N.Y	12,000	13,500	12,000	11,000	11,000	------	------
ROCKFORD, ILL	9,800	------	------	------	------	------	------
SACRAMENTO, CALIF	11,000	12,700	------	10,000	10,000	------	------
SAGINAW, MICH	------	------	------	------	------	------	------
ST.JOSEPH, MO	------	------	------	------	------	------	------
ST.LOUIS, MO.-ILL	11,200	12,500	15,000	10,500	10,000	------	------
SALT LAKE CITY, UTAH	10,100	10,600	15,000	9,500	10,000	------	------
SAN ANGELO, TEX	------	------	------	------	------	------	------
SAN ANTONIO, TEX	10,000	12,100	------	9,100	9,900	------	------
SAN BERNARDINO-RIVERSIDE-ONTARIO, CALIF	10,800	11,800	------	10,000	10,300	------	------
SAN DIEGO, CALIF	10,900	12,000	------	10,500	10,200	------	------
SAN FRANCISCO-OAKLAND, CALIF	12,000	13,000	15,000	10,400	10,800	12,000	12,000
SAN JOSE, CALIF	12,600	13,600	15,000	11,800	11,500	------	------
SAN JUAN, P.R	9,500	10,700	------	6,700	8,000	------	------
SANTA BARBARA, CALIF	12,200	14,200	------	12,000	10,600	------	------
SAVANNAH, GA	9,400	------	------	8,400	9,500	------	------
SCRANTON, PA	8,300	------	------	------	------	------	------
SEATTLE-EVERETT, WASH	11,000	12,000	13,000	10,000	10,300	------	------

TABLE A-30.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND HIGHEST DEGREE, 1964—CONTINUED

LOCATION	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
STANDARD METROPOLITAN STATISTICAL AREAS - CONTINUED							
SHREVEPORT, LA	10,000	------	------	9,600	10,000	------	------
SIOUX CITY, IOWA-NEB	------	------	------	------	------	------	------
SIOUX FALLS, S.DAK	7,900	------	------	------	------	------	------
SOUTH BEND, IND	9,700	10,500	------	7,900	9,000	------	------
SPOKANE, WASH	8,600	9,000	------	7,800	9,800	------	------
SPRINGFIELD, ILL	9,900	------	------	------	9,000	------	------
SPRINGFIELD, MO	8,800	9,400	------	------	------	------	------
SPRINGFIELD, OHIO	9,300	------	------	------	------	------	------
SPRINGFIELD-CHICOPEE-HOLYOKE, MASS.-CONN	10,900	12,000	------	10,600	10,100	------	------
STAMFORD, CONN	12,700	14,400	------	11,400	10,000	------	------
STEUBENVILLE-WEIRTON, OHIO-W.VA	------	------	------	------	------	------	------
STOCKTON, CALIF	9,000	9,000	------	9,000	------	------	------
SYRACUSE, N.Y	11,200	11,700	16,000	10,300	11,000	------	------
TACOMA, WASH	9,000	10,000	------	8,700	8,500	------	------
TAMPA-ST.PETERSBURG, FLA	9,500	10,100	------	7,800	9,300	------	------
TERRE HAUTE, IND	9,500	10,500	------	8,400	8,100	------	------
TEXARKANA, TEX.-ARK	------	------	------	------	------	------	------
TOLEDO, OHIO-MICH	10,200	11,500	------	9,600	10,000	------	------
TOPEKA, KANS	9,700	10,500	------	7,400	8,600	------	------
TRENTON, N.J	12,000	13,000	------	10,600	10,400	------	------
TUCSON, ARIZ	10,000	10,500	------	8,500	9,600	------	------
TULSA, OKLA	11,700	12,600	------	11,700	10,800	------	------
TUSCALOOSA, ALA	9,600	9,800	------	------	------	------	------
TYLER, TEX	10,000	------	------	8,500	10,200	------	------
UTICA-ROME, N.Y	9,500	10,400	------	9,000	9,100	------	------
VALLEJO-NAPA, CALIF	9,900	------	------	9,300	------	------	------
WACO, TEX	9,800	9,800	------	------	10,000	------	------
WASHINGTON, D.C.-MD.-VA	12,600	14,000	16,200	12,100	11,700	11,700	12,500
WATERBURY, CONN	10,600	13,000	------	10,400	9,800	------	------
WATERLOO, IOWA	9,200	------	------	------	------	------	------
WEST PALM BEACH, FLA	10,600	12,100	------	------	------	------	------
WHEELING, W.VA.-OHIO	9,000	------	------	------	------	------	------
WICHITA, KANS	10,000	11,400	------	8,500	10,000	------	------
WICHITA FALLS, TEX	------	------	------	------	------	------	------
WILKES-BARRE-HAZLETON, PA	7,800	------	------	7,000	------	------	------
WILMINGTON, DEL.-N.J.-MD	13,500	14,400	------	12,000	12,000	------	------
WINSTON-SALEM, N.C	10,400	10,300	------	9,500	10,000	------	------
WORCESTER, MASS	10,000	10,300	------	8,100	8,700	------	------
YORK, PA	9,200	------	------	------	9,100	------	------
YOUNGSTOWN-WARREN, OHIO	8,700	------	------	8,800	8,900	------	------
OTHER LOCATIONS	10,000	11,000	15,000	8,700	9,200	9,800	10,000

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-31.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND TYPE OF EMPLOYER, 1964

LOCATION	TOTAL	TYPE OF EMPLOYER							NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER	
ALL LOCATIONS	11,000	9,600	11,000	9,000	12,000	12,000	15,000	11,000	11,000
STANDARD METROPOLITAN STATISTICAL AREAS	11,300	9,900	11,700	9,600	12,000	12,000	16,000	11,400	11,800
ABILENE, TEX	9,000	6,700	------	------	------	10,000	------		
AKRON, OHIO	11,000	9,400	------	------	------	11,500	------	------	------
ALBANY, GA	------	------	------	------	------	------	------	------	------
ALBANY-SCHENECTADY-TROY, N.Y	12,000	9,700	11,300	11,300	------	14,000	------	------	------
ALBUQUERQUE, N.MEX	12,300	11,000	11,000	12,300	13,500	13,200	------	------	------
ALLENTOWN-BETHLEHEM-EASTON, PA.-N.J	10,200	8,500	------	------	------	12,000	------	------	------
ALTOONA, PA	------	------	------	------	------	------	------	------	------
AMARILLO, TEX	9,600	7,900	9,300	------	------	10,000	------	------	------
ANAHEIM-SANTA ANA-GARDEN GROVE, CALIF	12,800	8,700	------	------	------	13,500	------	------	------
ANN ARBOR, MICH	11,600	11,500	10,100	------	------	12,800	------	------	------
ASHEVILLE, N.C	9,600	------	9,500	------	------	10,000	------	------	------
ATLANTA, GA	10,100	9,600	11,000	9,400	------	11,000	------	------	------
ATLANTIC CITY, N.J	12,100	------	12,400	------	------	------	------	------	------
AUGUSTA, GA.-S.C	11,100	12,000	10,200	------	------	11,500	------	------	------
AUSTIN, TEX	9,600	9,500	10,000	7,800	------	11,500	------	------	------
BAKERSFIELD, CALIF	10,500	8,200	10,000	------	------	11,000	------	------	------
BALTIMORE, MD	11,000	10,200	10,800	10,000	10,800	12,000	------	------	------
BATON ROUGE, LA	11,000	10,000	10,100	------	------	13,000	------	------	------
BAY CITY, MICH	11,000	8,900	------	------	------	------	------	------	------
BEAUMONT-PORT ARTHUR, TEX	10,500	8,600	------	------	------	11,000	------	------	------
BILLINGS, MONT	9,700	------	------	------	------	10,000	------	------	------
BINGHAMTON, N.Y.-PA	11,800	9,000	------	------	------	12,500	------	------	------
BIRMINGHAM, ALA	11,300	12,000	------	------	10,600	10,500	------	------	------
BOISE CITY, IDAHO	------	------	------	------	------	------	------	------	------
BOSTON, MASS	11,500	10,000	12,000	9,200	12,000	13,000	16,000	10,000	------
BRIDGEPORT, CONN	10,000	8,000	------	------	------	11,000	------	------	------
BROCKTON, MASS	9,800	------	------	------	------	------	------	------	------
BROWNSVILLE-HARLINGEN-SAN BENITO, TEX	9,300	------	------	------	------	------	------	------	------
BUFFALO, N.Y	10,800	9,300	10,100	13,500	13,400	11,100	------	------	------
CANTON, OHIO	9,700	8,000	------	------	------	10,800	------	------	------
CEDAR RAPIDS, IOWA	9,600	8,900	------	------	------	11,500	------	------	------
CHAMPAIGN-URBANA, ILL	11,000	11,100	10,600	10,400	------	------	------	------	------
CHARLESTON, S.C	9,800	9,000	------	------	------	11,000	------	------	------
CHARLESTON, W.VA	11,000	------	------	------	------	11,500	------	------	------
CHARLOTTE, N.C	10,000	7,800	------	------	------	11,800	------	------	------
CHATTANOOGA, TENN.-GA	9,700	------	------	------	------	10,800	------	------	------
CHICAGO, ILL	11,200	10,500	11,600	9,300	12,200	11,500	19,800	11,800	------
CINCINNATI, OHIO-KY.-IND	10,700	9,000	10,600	------	13,000	11,100	------	------	------
CLEVELAND, OHIO	11,000	10,000	11,300	9,300	11,500	11,500	20,000	------	------
COLORADO SPRINGS	10,300	8,600	------	------	------	13,000	------	------	------
COLUMBIA, S.C	9,800	9,700	------	------	------	------	------	------	------
COLUMBUS, GA.-ALA	10,600	------	------	------	------	------	------	------	------
COLUMBUS, OHIO	11,000	10,400	10,600	8,400	12,000	12,000	------	------	------
CORPUS CHRISTI, TEX	10,000	------	------	------	------	10,000	------	------	------
DALLAS, TEX	11,700	9,700	10,600	------	9,000	12,000	12,000	------	------
DAVENPORT-ROCK ISLAND-MOLINE, IOWA-ILL	9,200	7,900	11,000	------	------	10,100	------	------	------
DAYTON, OHIO	11,000	9,500	12,100	------	10,000	11,000	------	------	------
DECATUR, ILL	10,800	------	------	------	------	11,400	------	------	------
DENVER, COLO	11,000	10,000	11,200	9,500	11,000	11,400	12,000	------	------
DES MOINES, IOWA	10,000	8,900	------	------	------	12,000	------	------	------
DETROIT, MICH	10,900	9,100	10,000	9,500	11,500	11,700	15,000	------	------
DUBUQUE, IOWA	7,900	------	------	------	------	------	------	------	------
DULUTH-SUPERIOR, MINN.-WIS	8,400	8,300	------	------	------	9,600	------	------	------
DURHAM, N.C	12,000	10,900	13,700	------	13,200	12,500	------	------	------
EL PASO, TEX	9,600	8,500	------	------	------	11,000	------	------	------
ERIE, PA	10,000	7,300	------	------	------	11,000	------	------	------
EUGENE, OREG	9,300	10,000	7,300	------	------	------	------	------	------
EVANSVILLE, IND.-KY	10,000	8,400	------	------	------	11,200	------	------	------
FALL RIVER, MASS.-R.I	------	------	------	------	------	------	------	------	------
FARGO-MOORHEAD, N.DAK.-MINN	9,000	9,000	------	------	------	------	------	------	------
FITCHBURG-LEOMINSTER, MASS	10,000	------		------	------	------	------	------	------
FLINT, MICH	9,900	9,100	------	------	------	10,400	------	------	------
FORT LAUDERDALE-HOLLYWOOD, FLA	10,300	------	------	------	------	------	------	------	------
FORT SMITH, ARK.-OKLA	------	------	------	------	------	------	------	------	------
FORT WAYNE, IND	9,800	7,300	------	------	------	12,000	------	------	------
FORT WORTH, TEX	10,800	8,500	10,500	------	------	12,300	------	------	------
FRESNO, CALIF	9,800	9,000	9,400	10,000	------	10,200	------	------	------
GADSDEN, ALA	------	------	------	------	------	------	------	------	------
GALVESTON-TEXAS CITY, TEX	11,500	11,000	------	------	------	12,000	------	------	------
GARY-HAMMOND-EAST CHICAGO, IND	12,100	7,600	------	------	------	13,500	------	------	------
GRAND RAPIDS, MICH	9,000	7,600	------	------	------	10,700	------	------	------
GREAT FALLS, MONT	9,600	------	------	------	------	------	------	------	------
GREEN BAY, WIS	9,000	------	------	------	------	------	------	------	------
GREENSBORO-HIGH POINT, N.C	9,200	8,400	------	------	------	10,200	------	------	------
GREENVILLE, S.C	8,000	------	------	------	------	12,000	------	------	------
HAMILTON-MIDDLETOWN, OHIO	9,600	9,400	------	------	------	11,700	------	------	------
HARRISBURG, PA	9,300	7,600	------	8,400	------	11,500	------	------	------
HARTFORD, CONN	10,900	7,900	------	10,000	13,000	12,000	------	------	------
HONOLULU, HAWAII	10,300	10,100	10,000	11,000	12,200	10,800	------	------	------
HOUSTON, TEX	12,000	10,200	10,000	------	10,000	12,000	15,000	------	------
HUNTINGTON-ASHLAND, W.VA.-KY.-OHIO	9,000	7,800	------	------	------	9,600	------	------	------
HUNTSVILLE, ALA	11,700	------	12,000	------	------	11,000	------	------	------
INDIANAPOLIS, IND	10,500	9,500	10,400	7,500	------	11,400	------	------	------
JACKSON, MICH	9,300	------	------	------	------	------	------	------	------
JACKSON, MISS	10,100	10,000	11,000	------	------	10,200	------	------	------
JACKSONVILLE, FLA	9,800	------	------	------	------	10,000	------	------	------
JERSEY CITY, N.J	10,800	9,300	------	------	------	11,000	------	------	------
JOHNSTOWN, PA	7,700	------	------	------	------	------	------	------	------

TABLE A-31.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND TYPE OF EMPLOYER, 1964—CONTINUED

LOCATION	TOTAL	TYPE OF EMPLOYER							NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER	
STANDARD METROPOLITAN STATISTICAL AREAS - CONTINUED									
KALAMAZOO, MICH	12,000	9,000	------	------	------	13,200	------	------	------
KANSAS CITY, MO.-KANS	10,300	8,400	10,000	------	10,800	11,400	------	------	------
KENOSHA, WIS	------	------	------	------	------	------	------	------	------
KNOXVILLE, TENN	12,000	9,500	11,800	10,800	12,200	12,600	------	------	------
LAFAYETTE, LA	9,900	8,000	------	------	------	10,000	------	------	------
LAKE CHARLES, LA	9,600	7,200	------	------	------	10,200	------	------	------
LANCASTER, PA	10,800	8,400	------	------	------	11,700	------	------	------
LANSING, MICH	11,000	11,000	10,500	10,500	------	------	------	------	------
LAREDO, TEX	------	------	------	------	------	------	------	------	------
LAS VEGAS, NEV	10,000	------	10,000	------	------	10,100	------	------	------
LAWRENCE-HAVERHILL, MASS.-N.H	10,100	8,500	------	------	------	11,000	------	------	------
LAWTON, OKLA	------	------	------	------	------	------	------	------	------
LEWISTON-AUBURN, MAINE	------	------	------	------	------	------	------	------	------
LEXINGTON, KY	10,800	10,700	11,300	------	------	------	------	------	------
LIMA, OHIO	8,500	------	------	------	------	------	------	------	------
LINCOLN, NEBR	9,700	9,500	10,300	------	------	11,000	------	------	------
LITTLE ROCK-NORTH LITTLE ROCK, ARK	10,500	11,000	10,400	------	------	10,800	------	------	------
LORAINE-ELYRIA, OHIO	10,000	10,000	------	------	------	10,500	------	------	------
LOS ANGELES-LONG BEACH, CALIF	12,500	10,100	11,100	11,000	15,000	13,500	20,000	10,000	------
LOUISVILLE, KY.-IND	10,500	9,800	------	------	------	11,000	------	------	------
LOWELL, MASS	10,000	8,000	------	------	------	10,800	------	------	------
LUBBOCK, TEX	9,300	9,200	------	------	------	9,600	------	------	------
LYNCHBURG, VA	9,600	8,200	------	------	------	11,200	------	------	------
MACON, GA	8,600	------	------	------	------	------	------	------	------
MADISON, WIS	10,500	11,000	10,600	9,200	------	10,000	------	------	------
MANCHESTER, N.H	------	------	------	------	------	------	------	------	------
MAYAGUEZ, P.R	9,600	9,500	------	------	------	------	------	------	------
MEMPHIS, TENN.-ARK	10,100	9,000	11,300	------	------	10,800	------	------	------
MERIDEN, CONN	------	------	------	------	------	------	------	------	------
MIAMI, FLA	10,000	9,300	10,600	------	------	13,200	------	------	------
MIDLAND, TEX	10,600	------	------	------	------	10,600	------	------	------
MILWAUKEE, WIS	10,000	9,100	11,800	9,400	------	10,500	------	------	------
MINNEAPOLIS-ST.PAUL, MINN	11,000	10,500	10,100	9,000	11,500	12,000	------	------	------
MOBILE, ALA	10,100	------	------	------	------	11,500	------	------	------
MONROE, LA	8,400	8,300	------	------	------	9,100	------	------	------
MONTGOMERY, ALA	8,700	------	------	------	------	------	------	------	------
MUNCIE, IND	8,800	8,500	------	------	------	------	------	------	------
MUSKEGON-MUSKEGON HEIGHTS, MICH	10,700	------	------	------	------	12,000	------	------	------
NASHVILLE, TENN	10,000	10,000	11,000	7,100	------	11,000	------	------	------
NEW BEDFORD, MASS	------	------	------	------	------	------	------	------	------
NEW BRITAIN, CONN	9,000	------	------	------	------	------	------	------	------
NEW HAVEN, CONN	10,300	9,500	11,000	11,300	------	12,000	------	------	------
NEW LONDON-GROTON-NORWICH, CONN	11,000	9,300	10,500	------	------	11,800	------	------	------
NEW ORLEANS, LA	10,300	9,500	10,100	------	------	10,800	------	------	------
NEW YORK, N.Y	12,000	10,000	10,900	9,700	11,500	13,800	18,000	12,000	12,500
NEWARK, N.J	12,100	8,800	11,000	------	9,000	12,800	16,000	------	------
NEWPORT NEWS-HAMPTON, VA	10,300	------	10,300	------	------	------	------	------	------
NORFOLK-PORTSMOUTH, VA	9,000	7,500	10,100	------	------	11,700	------	------	------
NORWALK, CONN	12,200	------	------	------	------	13,000	------	------	------
ODESSA, TEX	10,000	------	------	------	------	10,200	------	------	------
OGDEN, UTAH	9,600	------	10,900	------	------	------	------	------	------
OKLAHOMA CITY, OKLA	10,200	9,800	10,600	------	------	10,700	------	------	------
OMAHA, NEBR.-IOWA	10,500	9,500	12,500	------	------	10,800	------	------	------
ORLANDO, FLA	11,000	7,500	10,300	------	------	11,700	------	------	------
PATERSON-CLIFTON-PASSAIC, N.J	11,300	8,500	------	------	12,500	12,000	------	------	------
PENSACOLA, FLA	10,000	------	------	------	------	10,500	------	------	------
PEORIA, ILL	10,300	8,300	10,600	------	------	11,500	------	------	------
PHILADELPHIA, PA.-N.J	11,300	9,600	11,000	9,000	10,900	12,000	18,000	10,000	------
PHOENIX, ARIZ	10,000	9,200	10,000	8,200	------	11,000	------	------	------
PITTSBURGH, PA	11,900	10,100	11,700	------	10,600	12,200	------	------	------
PITTSFIELD, MASS	11,600	------		------	------	12,000	------	------	------
PONCE, P.R	------	------	------	------	------	------	------	------	------
PORTLAND, MAINE	8,000	------	------	------	------	11,400	------	------	------
PORTLAND, OREG.-WASH	10,000	9,100	11,000	8,200	11,200	10,200	------	------	------
PROVIDENCE-PAWTUCKET-WARWICK, R.I.-MASS	9,600	9,000	------	------	------	11,500	------	------	------
PROVO-OREM, UTAH	8,800	8,600	------	------	------	------	------	------	------
PUEBLO, COLO	8,400	------	------	------	------	------	------	------	------
RACINE, WIS	10,000	------	---	------	------	10,500	------	------	------
RALEIGH, N.C	10,000	10,000	10,000	8,700	------	------	------	------	------
READING, PA	9,000	7,800	------	------	------	9,100	------	------	------
RENO, NEV	9,800	9,600	10,000	------	------	------	------	------	------
RICHMOND, VA	10,600	10,000	------	8,400	------	11,700	------	------	------
ROANOKE, VA	9,400	------	------	------	------	------	------	------	------
ROCHESTER, N.Y	12,000	10,000	------	------	------	13,000	------	------	------
ROCKFORD, ILL	9,800	------	------	------	------	10,200	------	------	------
SACRAMENTO, CALIF	11,000	10,800	9,800	11,500	------	11,800	------	------	------
SAGINAW, MICH	------	------	------	------	------	------	------	------	------
ST.JOSEPH, MO	------	------	------	------	------	------	------	------	------
ST.LOUIS, MO.-ILL	11,200	10,000	10,300	8,300	10,000	12,000	------	------	------
SALT LAKE CITY, UTAH	10,100	10,000	10,700	7,500	------	10,800	------	------	------
SAN ANGELO, TEX	------	------	------	------	------	------	------	------	------
SAN ANTONIO, TEX	10,000	7,200	10,600	------	11,200	10,500	------	------	------
SAN BERNARDINO-RIVERSIDE-ONTARIO, CALIF	10,800	10,000	10,600	10,000	17,000	11,600	------	------	------
SAN DIEGO, CALIF	10,900	9,500	10,600	------	10,000	13,000	------	------	------
SAN FRANCISCO-OAKLAND, CALIF	12,000	11,000	11,600	11,500	12,300	12,500	17,000	------	------
SAN JOSE, CALIF	12,600	10,900	12,500	10,200	11,000	13,600	15,000	------	------
SAN JUAN, P.R	9,500	8,000	10,600	8,000	------	------	------	------	------
SANTA BARBARA, CALIF	12,200	9,500	------	------	------	14,500	------	------	------
SAVANNAH, GA	9,400	------	9,200	------	------	10,000	------	------	------
SCRANTON, PA	8,300	8,000	------	------	------	------	------	------	------
SEATTLE-EVERETT, WASH	11,000	10,000	10,100	8,000	------	12,000	------	------	------

TABLE A-31.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND TYPE OF EMPLOYER, 1964—CONTINUED

LOCATION	TOTAL	TYPE OF EMPLOYER							NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER	
STANDARD METROPOLITAN STATISTICAL AREAS - CONTINUED									
SHREVEPORT, LA	10,000	------	------	------	------	10,000	------	------	------
SIOUX CITY, IOWA-NEB	------	------	------	------	------	------	------	------	------
SIOUX FALLS, S.DAK	7,900	------	------	------	------	------	------	------	------
SOUTH BEND, IND	9,700	9,700	------	------	------	10,000	------	------	------
SPOKANE, WASH	8,600	7,500	------	------	------	11,000	------	------	------
SPRINGFIELD, ILL	9,900	------	------	9,600	------	------	------	------	------
SPRINGFIELD, MO	8,800	8,400	------	------	------	------	------	------	------
SPRINGFIELD, OHIO	9,300	8,700	------	------	------	------	------	------	------
SPRINGFIELD-CHICOPEE-HOLYOKE, MASS.-CONN	10,900	8,400	------	------	------	12,100	------	------	------
STAMFORD, CONN	12,700	------	------	------	------	13,000	------	------	------
STEUBENVILLE-WEIRTON, OHIO-W.VA	------	------	------	------	------	------	------	------	------
STOCKTON, CALIF	9,000	8,200	------	------	------	------	------	------	------
SYRACUSE, N.Y	11,200	10,500	------	------	------	12,000	------	------	------
TACOMA, WASH	9,000	8,100	------	------	------	9,800	------	------	------
TAMPA-ST.PETERSBURG, FLA	9,500	8,500	------	------	------	10,500	------	------	------
TERRE HAUTE, IND	9,500	9,300	------	------	------	9,600	------	------	------
TEXARKANA, TEX.-ARK	------	------	------	------	------	------	------	------	------
TOLEDO, OHIO-MICH	10,200	9,300	------	------	------	11,000	------	------	------
TOPEKA, KANS	9,700	7,000	------	9,500	14,000	------	------	------	------
TRENTON, N.J	12,000	9,200	------	9,500	12,500	13,400	------	------	------
TUCSON, ARIZ	10,000	9,600	10,300	------	------	11,200	------	------	------
TULSA, OKLA	11,700	8,600	------	------	------	12,000	------	------	------
TUSCALOOSA, ALA	9,600	9,600	------	------	------	------	------	------	------
TYLER, TEX	10,000	------	------	------	------	10,000	------	------	------
UTICA-ROME, N.Y	9,500	8,000	11,700	------	------	10,000	------	------	------
VALLEJO-NAPA, CALIF	9,900	------	------	------	------	------	------	------	------
WACO, TEX	9,800	8,800	------	------	------	11,400	------	------	------
WASHINGTON, D.C.-MD.-VA	12,600	10,000	12,900	11,000	14,800	13,800	18,000	14,000	------
WATERBURY, CONN	10,600	------	------	------	------	10,800	------	------	------
WATERLOO, IOWA	9,200	9,200	------	------	------	------	------	------	------
WEST PALM BEACH, FLA	10,600	10,600	------	------	------	10,200	------	------	------
WHEELING, W.VA.-OHIO	9,000	------	------	------	------	------	------	------	------
WICHITA, KANS	10,000	8,200	------	------	------	10,300	------	------	------
WICHITA FALLS, TEX	------	------	------	------	------	------	------	------	------
WILKES-BARRE-HAZLETON, PA	7,800	7,200	------	------	------	------	------	------	------
WILMINGTON, DEL.-N.J.-MD	13,500	9,800	------	------	------	13,800	------	------	------
WINSTON-SALEM, N.C	10,400	9,000	------	------	------	11,400	------	------	------
WORCESTER, MASS	10,000	8,900	------	------	9,800	13,000	------	------	------
YORK, PA	9,200	7,900	------	------	------	10,200	------	------	------
YOUNGSTOWN-WARREN, OHIO	8,700	7,600	------	------	------	9,800	------	------	------
OTHER LOCATIONS	10,000	9,000	10,000	8,000	10,400	11,000	12,000	10,000	10,000

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-32.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND WORK ACTIVITY, 1964

LOCATION	TOTAL	WORK ACTIVITY								
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER	NO REPORT OF WORK ACTIVITY
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D				
ALL LOCATIONS	11,000	11,000	11,000	11,000	14,500	15,500	8,900	9,800	10,500	11,200
STANDARD METROPOLITAN STATISTICAL AREAS	11,300	11,100	11,300	11,300	15,000	16,000	9,000	10,000	10,600	11,800
ABILENE, TEX	9,000	------	------	------	------	------	6,400	------	9,800	------
AKRON, OHIO	11,000	10,500	11,500	10,500	14,500	15,000	9,000	10,000	10,700	------
ALBANY, GA	------	------	------	------	------	------	------	------	------	------
ALBANY-SCHENECTADY-TROY, N.Y	12,000	13,000	13,600	12,500	16,000	17,000	9,100	9,630	11,000	------
ALBUQUERQUE, N.MEX	12,300	12,600	13,200	12,300	14,300	15,300	9,600	------	11,000	------
ALLENTOWN-BETHLEHEM-EASTON, PA.-N.J	10,200	11,000	------	10,800	15,000	15,500	8,300	9,200	------	------
ALTOONA, PA	------	------	------	------	------	------	------	------	------	------
AMARILLO, TEX	9,600	8,900	------	------	12,000	------	7,500	9,000	9,800	------
ANAHEIM-SANTA ANA-GARDEN GROVE, CALIF	12,800	12,300	12,800	12,500	16,500	17,000	8,400	9,700	12,400	------
ANN ARBOR, MICH	11,600	10,900	10,800	11,000	16,500	17,200	11,500	------	10,100	------
ASHEVILLE, N.C	9,600	9,000	------	9,000	11,700	------	------	------	8,600	------
ATLANTA, GA	10,100	10,300	10,000	11,000	13,300	14,000	8,800	9,400	10,400	------
ATLANTIC CITY, N.J	12,100	------	------	------	------	------	------	------	------	------
AUGUSTA, GA.-S.C	11,100	10,900	------	11,000	14,400	15,000	------	10,000	10,000	------
AUSTIN, TEX	9,600	8,800	8,500	9,300	11,000	13,700	10,000	------	8,400	------
BAKERSFIELD, CALIF	10,500	10,000	------	9,200	13,000	------	------	10,000	10,500	------
BALTIMORE, MD	11,000	11,000	10,800	11,000	15,000	15,500	10,000	10,000	9,900	------
BATON ROUGE, LA	11,000	10,600	10,000	11,200	15,000	14,700	9,500	10,000	10,100	------
BAY CITY, MICH	11,000	------	------	------	------	------	------	------	------	------
BEAUMONT-PORT ARTHUR, TEX	10,500	10,200	------	10,800	13,800	15,500	7,600	10,000	------	------
BILLINGS, MONT	9,700	------	------	------	------	------	------	------	10,000	------
BINGHAMTON, N.Y.-PA	11,800	12,000	------	12,000	14,500	16,000	8,400	9,900	------	------
BIRMINGHAM, ALA	11,300	11,100	11,400	11,500	16,000	------	9,600	9,000	------	------
BOISE CITY, IDAHO	------	------	------	------	------	------	------	------	------	------
BOSTON, MASS	11,500	11,000	10,500	12,000	16,000	16,700	9,200	10,000	11,000	12,100
BRIDGEPORT, CONN	10,000	9,400	------	------	13,000	13,000	7,500	------	------	------
BROCKTON, MASS	9,800	------	------	------	------	------	------	------	------	------
BROWNSVILLE-HARLINGEN-SAN BENITO, TEX	9,300	------	------	------	------	------	------	------	------	------
BUFFALO, N.Y	10,800	10,800	11,000	11,500	14,900	15,000	9,000	9,000	10,400	10,000
CANTON, OHIO	9,700	9,700	------	------	------	------	------	------	------	------
CEDAR RAPIDS, IOWA	9,600	9,900	------	------	------	------	8,900	------	------	------
CHAMPAIGN-URBANA, ILL	11,000	10,200	10,000	11,000	15,800	15,200	11,000	------	10,000	11,000
CHARLESTON, S.C	9,800	10,000	------	------	------	------	8,400	------	------	------
CHARLESTON, W.VA	11,000	11,000	11,800	12,000	16,000	17,300	------	9,100	9,400	------
CHARLOTTE, N.C	10,000	10,500	------	------	13,500	------	7,800	10,000	------	------
CHATTANOOGA, TENN.-GA	9,700	9,000	------	------	15,400	------	------	8,600	------	------
CHICAGO, ILL	11,200	10,900	11,800	10,500	15,000	15,000	9,200	9,700	10,800	11,200
CINCINNATI, OHIO-KY.-IND	10,700	10,300	11,400	10,000	14,000	14,100	8,600	9,200	10,500	12,000
CLEVELAND, OHIO	11,000	10,700	11,400	10,500	15,000	15,000	9,000	10,000	10,500	11,000
COLORADO SPRINGS	10,300	12,800	------	------	------	------	8,300	------	------	------
COLUMBIA, S.C	9,800	------	------	------	12,000	------	9,500	------	------	------
COLUMBUS, GA.-ALA	10,600	------	------	------	------	------	------	------	------	------
COLUMBUS, OHIO	11,000	10,800	10,800	10,800	14,400	15,000	10,100	9,300	9,300	11,900
CORPUS CHRISTI, TEX	10,000	10,500	------	11,000	13,400	------	------	9,000	10,000	------
DALLAS, TEX	11,700	11,600	13,300	11,300	15,000	16,600	9,300	9,600	11,000	12,000
DAVENPORT-ROCK ISLAND-MOLINE, IOWA-ILL	9,200	------	------	------	14,000	------	7,300	------	------	------
DAYTON, OHIO	11,000	10,800	11,800	10,600	13,500	13,800	9,000	9,000	11,000	------
DECATUR, ILL	10,800	10,300	------	------	------	------	------	------	------	------
DENVER, COLO	11,000	11,000	11,600	10,300	13,600	14,100	9,200	9,000	11,000	11,700
DES MOINES, IOWA	10,000	------	------	------	14,000	------	8,400	------	------	------
DETROIT, MICH	10,900	10,800	11,400	10,800	14,400	15,600	8,700	10,000	10,200	11,300
DUBUQUE, IOWA	7,900	------	------	------	------	------	------	------	------	------
DULUTH-SUPERIOR, MINN.-WIS	8,400	------	------	------	12,000	------	8,000	------	------	------
DURHAM, N.C	12,000	11,400	10,500	12,400	15,700	15,800	10,700	------	------	------
EL PASO, TEX	9,600	------	------	------	------	------	7,800	------	------	------
ERIE, PA	10,000	10,000	------	------	------	------	7,000	------	------	------
EUGENE, OREG	9,300	9,500	9,500	------	9,000	------	10,000	------	------	------
EVANSVILLE, IND.-KY	10,000	10,400	------	10,400	14,000	------	------	------	10,000	------
FALL RIVER, MASS.-R.I	------	------	------	------	------	------	------	------	------	------
FARGO-MOORHEAD, N.DAK.-MINN	9,000	9,600	10,000	------	------	------	8,400	------	------	------
FITCHBURG-LEOMINSTER, MASS	10,000	------	------	------	------	------	------	------	------	------
FLINT, MICH	9,900	------	------	------	------	------	9,000	------	------	------
FORT LAUDERDALE-HOLLYWOOD, FLA	10,300	------	------	------	------	------	------	------	------	------
FORT SMITH, ARK.-OKLA	------	------	------	------	------	------	------	------	------	------
FORT WAYNE, IND	9,800	10,700	------	------	15,000	------	7,200	------	------	------
FORT WORTH, TEX	10,800	11,000	------	10,900	14,500	15,000	8,400	8,700	12,000	------
FRESNO, CALIF	9,800	9,900	------	10,000	10,300	------	9,000	------	------	------
GADSDEN, ALA	------	------	------	------	------	------	------	------	------	------
GALVESTON-TEXAS CITY, TEX	11,500	11,000	11,000	10,900	14,200	14,100	11,500	9,700	------	------
GARY-HAMMOND-EAST CHICAGO, IND	12,100	13,200	------	13,100	16,300	17,300	7,500	11,700	------	------
GRAND RAPIDS, MICH	9,000	------	------	------	12,000	------	7,300	------	------	------
GREAT FALLS, MONT	9,600	------	------	------	------	------	------	------	------	------
GREEN BAY, WIS	9,000	------	------	------	------	------	------	------	------	------
GREENSBORO-HIGH POINT, N.C	9,200	9,500	------	------	12,000	------	8,000	------	------	------
GREENVILLE, S.C	8,000	------	------	------	------	------	------	------	------	------
HAMILTON-MIDDLETOWN, OHIO	9,600	------	------	------	------	------	9,200	------	------	------
HARRISBURG, PA	9,300	9,500	------	------	10,500	11,000	7,600	------	8,000	------
HARTFORD, CONN	10,900	10,500	12,100	10,900	15,000	15,600	7,800	10,000	10,500	------
HONOLULU, HAWAII	10,300	10,300	10,000	10,500	13,000	14,400	9,300	9,000	10,000	------
HOUSTON, TEX	12,000	10,600	11,000	11,000	16,000	15,500	9,900	10,000	11,200	10,600
HUNTINGTON-ASHLAND, W.VA.-KY.-OHIO	9,000	------	------	------	12,000	------	7,500	8,700	------	------
HUNTSVILLE, ALA	11,700	10,600	11,800	11,700	14,000	14,000	------	10,300	11,000	------
INDIANAPOLIS, IND	10,500	11,000	11,100	11,000	14,000	15,000	8,600	9,500	10,000	------
JACKSON, MICH	9,300	------	------	------	------	------	------	------	------	------
JACKSON, MISS	10,100	10,300	------	------	12,000	------	8,700	------	10,000	------
JACKSONVILLE, FLA	9,800	------	------	------	11,600	------	------	------	10,500	------
JERSEY CITY, N.J	10,800	10,500	9,800	10,800	15,400	15,500	8,600	10,000	10,000	------
JOHNSTOWN, PA	7,700	------	------	------	------	------	------	------	------	------

TABLE A-32.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND WORK ACTIVITY, 1964—CONTINUED

LOCATION	TOTAL	WORK ACTIVITY								NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER	
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D				
STANDARD METROPOLITAN STATISTICAL AREAS - CONTINUED										
KALAMAZOO, MICH	12,000	12,100	12,200	12,500	15,900	16,200	8,800	------	------	------
KANSAS CITY, MO.-KANS	10,300	10,000	10,500	10,000	14,400	15,000	7,500	9,500	10,800	------
KENOSHA, WIS	------	------	------	------	------	------	------	------	------	------
KNOXVILLE, TENN	12,000	12,000	12,400	11,300	15,000	15,200	9,000	10,400	10,700	------
LAFAYETTE, LA	9,900	------	------	------	------	------	7,800	10,000	10,000	------
LAKE CHARLES, LA	9,600	------	------	------	12,000	------	------	9,000	------	------
LANCASTER, PA	10,800	10,600	------	10,800	15,500	15,500	8,500	8,100	------	------
LANSING, MICH	11,000	10,800	11,000	10,800	15,000	15,000	10,700	------	10,100	------
LAREDO, TEX	------	------	------	------	------	------	------	------	------	------
LAS VEGAS, NEV	10,000	9,900	------	10,000	11,700	------	------	------	------	------
LAWRENCE-HAVERHILL, MASS.-N.H	10,100	------	------	------	------	------	8,500	------	------	------
LAWTON, OKLA	------	------	------	------	------	------	------	------	------	------
LEWISTON-AUBURN, MAINE	------	------	------	------	------	------	------	------	------	------
LEXINGTON, KY	10,800	10,700	10,800	10,400	14,300	------	10,500	------	10,000	------
LIMA, OHIO	8,500	------	------	------	------	------	------	------	------	------
LINCOLN, NEBR	9,700	10,000	9,600	10,000	12,400	12,900	9,200	------	------	------
LITTLE ROCK-NORTH LITTLE ROCK, ARK	10,500	10,300	------	------	11,400	------	10,500	------	9,900	------
LORAINE-ELYRIA, OHIO	10,000	10,000	------	------	------	------	9,700	------	------	------
LOS ANGELES-LONG BEACH, CALIF	12,500	12,300	12,000	13,000	16,500	17,500	9,700	10,400	12,000	13,000
LOUISVILLE, KY.-IND	10,500	10,800	11,300	10,000	14,000	15,000	8,500	9,800	9,200	------
LOWELL, MASS	10,000	9,900	------	------	------	------	7,500	------	------	------
LUBBOCK, TEX	9,300	------	------	------	------	------	9,100	------	9,600	------
LYNCHBURG, VA	9,600	------	------	------	------	------	8,200	------	------	
MACON, GA	8,600	------	------	------	------	------	------	------	------	------
MADISON, WIS	10,500	10,000	10,000	10,300	12,900	14,800	11,200	8,600	10,000	13,000
MANCHESTER, N.H	------	------	------	------	------	------	------	------	------	------
MAYAGUEZ, P.R	9,600	------	------	------	------	------	------	------	------	------
MEMPHIS, TENN.-ARK	10,100	11,000	11,200	11,000	13,200	16,000	8,200	9,000	10,000	------
MERIDEN, CONN	------	------	------	------	------	------	------	------	------	------
MIAMI, FLA	10,000	10,000	9,800	10,000	13,600	14,000	8,400	------	11,000	------
MIDLAND, TEX	10,600	------	------	------	15,000	------	------	10,000	10,000	------
MILWAUKEE, WIS	10,000	9,300	10,500	9,000	14,000	15,000	8,500	9,000	10,000	------
MINNEAPOLIS-ST.PAUL, MINN	11,000	10,500	10,800	10,600	14,200	15,000	10,400	9,700	10,400	13,500
MOBILE, ALA	10,100	------	------	------	------	------	------	------	------	------
MONROE, LA	8,400	------	------	------	------	------	7,900	------	------	------
MONTGOMERY, ALA	8,700	------	------	------	------	------	------	------	------	------
MUNCIE, IND	8,800	------	------	------	------	------	8,400	------	------	------
MUSKEGON-MUSKEGON HEIGHTS, MICH	10,700	------	------	------	------	------	------	------	------	------
NASHVILLE, TENN	10,000	10,000	10,000	9,500	12,000	12,300	9,600	------	9,000	------
NEW BEDFORD, MASS	------	------	------	------	------	------	------	------	------	------
NEW BRITAIN, CONN	9,000	------	------	------	------	------	------	------	------	------
NEW HAVEN, CONN	10,300	10,000	9,500	11,000	15,600	15,100	10,000	10,300	9,200	------
NEW LONDON-GROTON-NORWICH, CONN	11,000	10,600	11,000	10,600	14,500	15,300	9,200	------	------	------
NEW ORLEANS, LA	10,300	9,800	10,000	9,500	13,600	13,300	8,800	9,600	10,500	------
NEW YORK, N.Y	12,000	11,400	11,100	11,500	16,500	17,000	9,500	11,000	11,700	12,000
NEWARK, N.J	12,100	12,000	13,000	12,000	16,000	16,600	8,500	10,000	10,500	11,700
NEWPORT NEWS-HAMPTON, VA	10,300	9,800	9,800	9,800	14,000	------	------	------	------	------
NORFOLK-PORTSMOUTH, VA	9,000	10,000	------	------	------	------	7,300	------	------	------
NORWALK, CONN	12,200	12,000	------	12,000	16,500	18,000	------	------	------	------
ODESSA, TEX	10,000	------	------	------	------	------	------	------	------	------
OGDEN, UTAH	9,600	------	------	------	12,100	------	------	------	------	------
OKLAHOMA CITY, OKLA	10,200	11,000	11,000	10,500	13,300	12,500	9,200	10,000	10,000	------
OMAHA, NEBR.-IOWA	10,500	11,500	------	------	14,500	------	9,000	7,900	10,900	------
ORLANDO, FLA	11,000	10,000	------	10,900	14,600	15,000	6,500	------	------	------
PATERSON-CLIFTON-PASSAIC, N.J	11,300	10,500	12,000	10,200	15,700	15,900	8,100	10,000	10,100	10,500
PENSACOLA, FLA	10,000	10,000	------	------	------	------	------	------	------	------
PEORIA, ILL	10,300	10,600	10,100	10,600	14,500	14,700	8,300	------	------	------
PHILADELPHIA, PA.-N.J	11,300	11,000	11,000	11,400	15,500	16,000	8,800	9,900	10,600	12,000
PHOENIX, ARIZ	10,000	10,000	10,600	9,300	12,300	13,500	9,000	8,400	11,000	------
PITTSBURGH, PA	11,900	11,100	11,700	11,000	15,300	16,000	9,400	10,200	11,000	14,000
PITTSFIELD, MASS	11,600	11,000	------	------	------	------	------	------	------	------
PONCE, P.R	------	------	------	------	------	------	------	------	------	------
PORTLAND, MAINE	8,000	------	------	------	------	------	------	------	------	------
PORTLAND, OREG.-WASH	10,000	10,000	10,500	10,000	11,800	12,500	8,400	8,500	10,500	------
PROVIDENCE-PAWTUCKET-WARWICK, R.I.-MASS	9,600	9,000	9,000	8,800	14,500	15,000	8,500	10,100	9,500	------
PROVO-OREM, UTAH	8,800	------	------	------	11,000	------	8,500	------	------	------
PUEBLO, COLO	8,400	------	------	------	------	------	------	------	------	------
RACINE, WIS	10,000	9,500	------	------	13,400	------	------	------	------	------
RALEIGH, N.C	10,000	10,000	10,000	10,000	12,600	15,000	9,600	------	9,300	------
READING, PA	9,000	8,800	------	------	------	------	7,600	------	------	------
RENO, NEV	9,800	9,600	------	------	------	------	8,800	------	------	------
RICHMOND, VA	10,600	10,500	10,300	11,100	14,200	15,000	9,500	9,000	10,000	------
ROANOKE, VA	9,400	------	------	------	------	------	------	------	------	------
ROCHESTER, N.Y	12,000	12,000	12,000	12,000	16,700	17,100	9,500	10,500	10,600	10,000
ROCKFORD, ILL	9,900	------	------	------	------	------	------	------	------	------
SACRAMENTO, CALIF	11,000	10,600	10,600	11,000	14,000	15,000	10,000	9,800	10,000	12,000
SAGINAW, MICH	------	------	------	------	------	------	------	------	------	------
ST.JOSEPH, MO	------	------	------	------	------	------	------	------	------	------
ST.LOUIS, MO.-ILL	11,200	11,100	11,700	11,100	14,800	15,000	9,100	9,400	10,700	11,000
SALT LAKE CITY, UTAH	10,100	10,100	10,300	10,000	12,500	13,200	9,500	9,000	10,000	------
SAN ANGELO, TEX	------	------	------	------	------	------	------	------	------	------
SAN ANTONIO, TEX	10,000	10,000	10,000	11,000	14,000	15,000	7,100	------	10,600	------
SAN BERNARDINO-RIVERSIDE-ONTARIO, CALIF	10,800	10,600	11,000	10,600	14,500	16,000	9,200	10,000	10,800	------
SAN DIEGO, CALIF	10,900	10,800	10,300	11,200	15,000	16,000	9,000	10,200	10,300	11,800
SAN FRANCISCO-OAKLAND, CALIF	12,000	11,800	11,700	12,000	15,600	16,200	10,200	10,000	11,000	11,000
SAN JOSE, CALIF	12,600	12,300	12,000	13,000	16,100	17,100	10,600	10,500	11,500	12,100
SAN JUAN, P.R	9,500	8,500	------	------	11,200	------	7,000	------	10,400	------
SANTA BARBARA, CALIF	12,200	13,000	10,600	14,300	19,100	20,500	9,100	------	10,000	------
SAVANNAH, GA	9,400	------	------	------	10,400	------	------	------	------	------
SCRANTON, PA	8,300	------	------	------	------	------	7,400	------	------	------
SEATTLE-EVERETT, WASH	11,000	10,800	10,400	11,000	14,000	15,000	9,600	9,000	10,800	11,500

TABLE A-32.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND WORK ACTIVITY, 1964—CONTINUED

LOCATION	TOTAL	WORK ACTIVITY								NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER	
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D				
STANDARD METROPOLITAN STATISTICAL AREAS - CONTINUED										
SHREVEPORT, LA	10,000	------	------	------	13,000	------	------	9,000	10,000	------
SIOUX CITY, IOWA-NEB	------	------	------	------	------	------	------	------	------	------
SIOUX FALLS, S.DAK	7,900	------	------	------	------	------	------	------	------	------
SOUTH BEND, IND	9,700	9,500	10,100	------	14,000	------	9,000	------	------	------
SPOKANE, WASH	8,600	------	------	------	11,000	------	7,200	------	------	------
SPRINGFIELD, ILL	9,900	------	------	------	11,300	------	------	------	------	------
SPRINGFIELD, MO	8,800	------	------	------	------	------	8,000	------	------	------
SPRINGFIELD, OHIO	9,300	------	------	------	------	------	------	------	------	------
SPRINGFIELD-CHICOPEE-HOLYOKE, MASS.-CONN	10,900	10,800	------	10,800	15,000	15,500	8,300	9,500	------	------
STAMFORD, CONN	12,700	11,700	12,000	11,400	16,000	16,500	------	9,000	11,000	------
STEUBENVILLE-WEIRTON, OHIO-W.VA	------	------	------	------	------	------	------	------	------	------
STOCKTON, CALIF	9,000	------	------	------	------	------	7,800	------	------	------
SYRACUSE, N.Y	11,200	11,400	11,000	11,600	15,000	15,500	10,000	10,000	10,800	------
TACOMA, WASH	9,000	9,300	------	------	10,700	------	7,500	------	9,600	------
TAMPA-ST.PETERSBURG, FLA	9,500	9,900	------	------	12,000	14,500	8,200	------	9,900	------
TERRE HAUTE, IND	9,500	9,600	------	------	13,000	------	9,000	------	------	------
TEXARKANA, TEX.-ARK	------	------	------	------	------	------	------	------	------	------
TOLEDO, OHIO-MICH	10,200	10,200	11,500	10,200	13,000	14,000	9,000	9,300	------	------
TOPEKA, KANS	9,700	------	------	------	12,500	------	7,000	------	10,900	------
TRENTON, N.J	12,000	11,800	11,700	12,000	15,000	16,000	9,000	10,500	10,000	------
TUCSON, ARIZ	10,000	10,000	9,600	10,200	13,800	14,000	9,000	------	9,800	------
TULSA, OKLA	11,700	11,500	12,000	11,400	15,000	16,000	8,500	10,000	10,600	------
TUSCALOOSA, ALA	9,600	------	------	------	------	------	9,400	------	------	------
TYLER, TEX	10,000	------	------	------	------	------	------	------	10,000	------
UTICA-ROME, N.Y	9,500	10,500	------	------	11,700	------	7,500	------	------	------
VALLEJO-NAPA, CALIF	9,900	------	------	------	------	------	------	------	------	------
WACO, TEX	9,800	------	------	------	------	------	8,100	------	------	------
WASHINGTON, D.C.-MD.-VA	12,600	11,700	11,700	12,000	15,700	16,000	9,000	11,700	11,700	12,900
WATERBURY, CONN	10,600	9,900	------	9,900	13,000	12,000	------	9,900	------	------
WATERLOO, IOWA	9,200	------	------	------	------	------	8,800	------	------	------
WEST PALM BEACH, FLA	10,600	------	------	------	------	------	------	------	------	------
WHEELING, W.VA.-OHIO	9,000	------	------	------	------	------	------	------	------	------
WICHITA, KANS	10,000	10,000	------	------	13,900	------	8,200	8,600	10,000	------
WICHITA FALLS, TEX	------	------	------	------	------	------	------	------	------	------
WILKES-BARRE-HAZLETON, PA	7,800	------	------	------	------	------	7,100	------	------	------
WILMINGTON, DEL.-N.J.-MD	13,500	12,600	12,800	12,900	18,400	18,500	9,300	12,000	13,200	14,400
WINSTON-SALEM, N.C	10,400	10,800	11,500	------	17,400	------	8,700	------	------	------
WORCESTER, MASS	10,000	10,000	10,300	------	15,000	15,000	8,500	------	------	------
YORK, PA	9,200	------	------	------	------	------	7,900	------	------	------
YOUNGSTOWN-WARREN, OHIO	8,700	------	------	------	------	------	7,500	------	------	------
OTHER LOCATIONS	10,000	10,200	10,100	10,300	12,300	14,200	8,400	9,300	10,000	10,300

(A)INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH OR DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

NOTE—TEACHING SALARIES REFLECT A COMPOSITE OF ACADEMIC AND CALENDAR YEAR SALARIES FOR SECONDARY SCHOOLS AND INSTITUTIONS OF HIGHER EDUCATION. NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-33.—NUMBER OF SCIENTISTS, BY FOREIGN LANGUAGE AND FIELD, 1964

LANGUAGE	TOTAL	SCIENTIFIC AND TECHNICAL FIELD					
		CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES
INDO-EUROPEAN							
INDIC							
HINDU-URDU	638	140	47	6	105	44	30
BENGALI	78	15	7	------	11	6	2
GUJERATI	39	19	2	1	2	3	------
SINGHALESE	3	1	------	------	------	------	------
MARATHI	26	8	------	------	3	2	1
ORIYA	2	------	------	------	------	------	1
PANJABI	30	6	1	------	3	------	2
INDIC, OTHER	40	4	2	------	3	5	1
IRANIAN							
PERSIAN	177	33	23	------	11	13	7
PASHTU	5	------	1	------	------	------	------
KURDISH	6	1	------	------	------	------	1
IRANIAN, OTHER	18	5	5	------	1	1	1
BALTO-SLAVIC							
BALTIC (LITHUANIAN AND LETTISH)	492	217	19	5	58	25	19
RUSSIAN	8,167	1,904	792	242	1,982	906	115
POLISH	1,753	667	48	27	205	129	40
CZECH AND SLOVAK	802	272	51	20	88	49	23
SERBO-CROATIAN	245	48	13	5	37	21	3
BULGARIAN	48	15	1	------	5	3	------
UKRAINIAN	259	107	15	3	28	12	4
SLAVIC, OTHER	115	37	4	2	8	13	4
ROMANCE							
FRENCH	107,400	31,352	6,023	1,578	14,568	8,943	2,600
SPANISH	36,996	5,853	6,741	1,088	2,590	2,473	1,861
ITALIAN	4,957	1,414	261	121	597	414	81
PORTUGUESE	1,115	133	241	41	86	60	48
RUMANIAN	101	29	7	2	12	4	2
ROMANCE, OTHER	329	3	------	1	7	226	------
GERMANIC							
GERMAN	124,343	44,316	6,910	2,107	18,366	9,400	2,951
SWEDISH	1,220	263	98	33	140	89	79
DUTCH	1,173	332	87	16	212	77	36
NORWEGIAN	774	129	83	29	89	58	45
DANISH	528	96	43	12	93	44	18
GERMANIC, OTHER	531	63	19	12	43	39	9
MISCELLANEOUS INDO-EUROPEAN							
CELTIC	40	4	1	3	6	4	1
MODERN GREEK	1,160	350	56	29	133	101	6
ARMENIAN	199	68	5	3	37	11	------
ALBANIAN	20	6	1	------	------	------	1
INDO-EUROPEAN, OTHER	177	1	------	15	125	10	------
AFRO-ASIATIC							
SEMITIC							
ARABIC	768	139	161	7	71	39	25
HEBREW	1,468	283	29	14	259	214	13
AMHARIC	16	2	1	------	2	------	2
SEMITIC, OTHER	11	1	------	------	1	1	------
OTHER AFRO-ASIATIC							
BERBER	3	------	------	------	------	------	------
CUSHITIC	2	------	1	------	------	------	------
HAUSA AND AFRO-ASIATIC, OTHER	7	------	1	------	------	------	------
AFRICAN							
NIGER-CONGO							
SWAHILI	59	1	22	2	5	------	3
XHOSA AND ZULU	-------	------	------	------	------	------	------
OTHER BANTU	17	1	2	------	2	1	------
AKAN (TWI AND FANTE)	8	------	3	------	1	------	------
IBO	5	------	------	------	------	1	------
YORUBA	8	------	------	------	------	1	------
FULA (NI) (FULBE, FUL, PEUL, OR PEUHL)	-------	------	------	------	------	------	------
NIGER-CONGO, OTHER	12	1	------	------	------	------	------
OTHER SUB-SAHARAN AFRICAN	8	1	------	------	------	------	------

TABLE A-33.—NUMBER OF SCIENTISTS, BY FOREIGN LANGUAGE AND FIELD, 1964—CONTINUED

LANGUAGE	SCIENTIFIC AND TECHNICAL FIELD						
	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELDS
INDO-EUROPEAN							
INDIC							
HINDU-URDU	91	25	29	42	20	30	29
BENGALI	12	4	3	2	3	6	7
GUJERATI	1	------	3	2	1	1	4
SINGHALESE	1	------	------	------	------	1	------
MARATHI	4	------	1	1	1	3	2
ORIYA	1	------	------	------	------	------	------
PANJABI	4	4	------	5	2	2	1
INDIC, OTHER	3	1	3	1	2	13	2
IRANIAN							
PERSIAN	18	11	2	14	3	26	16
PASHTU	1	------	------	1	------	2	------
KURDISH	3	------	------	------	------	1	------
IRANIAN, OTHER	1	1	------	------	------	2	1
BALTO-SLAVIC							
BALTIC (LITHUANIAN AND LETTISH)	43	27	5	21	5	13	35
RUSSIAN	523	314	106	343	86	139	715
POLISH	172	109	24	97	25	27	183
CZECH AND SLOVAK	82	45	12	47	18	24	71
SERBO-CROATIAN	26	11	3	31	11	18	18
BULGARIAN	6	4	------	5	1	7	1
UKRAINIAN	20	12	4	14	4	11	25
SLAVIC, OTHER	8	7	3	12	3	6	8
ROMANCE							
FRENCH	16,253	9,380	1,271	5,913	1,768	522	7,229
SPANISH	4,587	3,979	543	2,971	669	385	3,256
ITALIAN	617	495	66	321	84	68	418
PORTUGUESE	132	55	18	119	29	52	101
RUMANIAN	11	7	------	8	1	10	8
ROMANCE, OTHER	2	11	16	6	1	9	47
GERMANIC							
GERMAN	17,002	6,987	1,214	4,523	1,240	403	8,924
SWEDISH	177	76	19	103	32	28	83
DUTCH	138	53	9	88	20	24	81
NORWEGIAN	100	47	14	76	27	18	59
DANISH	89	31	5	33	16	13	35
GERMANIC, OTHER	55	173	15	23	17	28	35
MISCELLANEOUS INDO-EUROPEAN							
CELTIC	5	3	------	2	------	7	4
MODERN GREEK	145	124	24	65	14	19	94
ARMENIAN	16	19	3	12	1	------	24
ALBANIAN	1	1	------	------	1	6	3
INDO-EUROPEAN, OTHER	4	1	------	1	------	------	20
AFRO-ASIATIC							
SEMITIC							
ARABIC	97	29	6	65	16	38	75
HEBREW	118	241	32	83	38	27	117
AMHARIC	4	2	------	------	1	1	1
SEMITIC, OTHER	2	------	------	1	------	5	------
OTHER AFRO-ASIATIC							
BERBER	------	------	------	------	------	2	1
CUSHITIC	------	------	------	------	------	1	------
HAUSA AND AFRO-ASIATIC, OTHER	1	------	------	------	------	3	2
AFRICAN							
NIGER-CONGO							
SWAHILI	------	------	------	5	4	10	7
XHOSA AND ZULU	------	------	------	------	------	------	------
OTHER BANTU	1	------	------	------	1	8	1
AKAN (TWI AND FANTE)	2	------	------	------	------	2	------
IBO	------	------	------	1	------	2	1
YORUBA	------	------	------	1	------	6	------
FULA (NI) (FULBE, FUL, PEUL, OR PEUHL)	------	------	------	------	------	------	------
NIGER-CONGO, OTHER	------	------	1	------	1	6	3
OTHER SUB-SAHARAN AFRICAN	1	1	------	------	------	2	3

TABLE A-33.—NUMBER OF SCIENTISTS, BY FOREIGN LANGUAGE AND FIELD, 1964—CONTINUED

LANGUAGE	TOTAL	SCIENTIFIC AND TECHNICAL FIELD					
		CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES
URALIC-ALTAIC							
OSMANLI TURKISH (ISTANBUL AND ANATOLIAN)	293	37	64	8	46	11	9
OTHER TURKIC	23	5	1	------	1	------	------
MONGOLIAN	10	------	------	------	------	------	------
ALTAIC, OTHER	4	------	------	------	------	1	------
HUNGARIAN	976	377	37	15	121	52	19
FINNISH	354	82	36	12	36	24	42
ESTONIAN AND OTHER BALTO-FINNIC	115	45	4	1	24	9	1
URALIC, OTHER	11	------	1	1	------	1	2
EAST ASIAN							
SINO-TIBETAN							
MANDARIN CHINESE	510	19	8	21	25	165	2
OTHER CHINESE	1,384	598	74	6	310	13	27
THAI-LAO	79	5	5	5	7	3	3
BURMESE	32	4	3	1	2	------	1
TIBETAN	5	------	------	------	------	------	------
VIETNAMESE	34	1	1	2	6	1	1
CAMBODIAN (KHMER)	14	------	2	------	------	3	------
OTHER SOUTHEAST ASIAN	28	1	------	1	1	------	------
OTHER EAST ASIAN							
JAPANESE	2,407	567	131	168	307	210	76
KOREAN	290	79	19	14	54	21	11
MALAYO-POLYNESIAN							
INDONESIAN							
MALAY AND BAHASA INDONESIA	227	21	60	------	20	9	13
JAVANESE	5	2	------	------	------	------	------
SUDANESE	-------	------	------	------	------	------	------
MADURESE	2	------	------	------	------	------	------
TAGALOG	67	14	6	6	3	5	------
VISAYAN	13	2	1	------	------	------	------
ILOCANO	8	1	1	1	1	------	------
MALAGASY	1	------	------	------	------	------	------
INDONESIAN, OTHER	46	6	1	------	4	2	1
OTHER MALAYO-POLYNESIAN							
POLYNESIAN	41	2	4	------	2	------	------
MELANESIAN	7	------	1	------	------	------	------
MICRONESIAN	7	------	2	------	------	------	------
DRAVIDIAN							
TAMIL	57	9	3	2	17	5	------
TELUGU	42	8	1	2	8	4	------
MALAYALAM	22	9	------	1	5	1	------
KANNADA	25	10	------	------	5	2	1
DRAVIDIAN, OTHER	5	------	------	------	------	1	------
AMERICAN INDIAN							
NORTH AMERICAN							
NAVAHO	13	------	5	------	------	------	2
NORTH AMERICAN INDIAN, OTHER	62	------	7	1	1	2	3
CENTRAL AMERICAN - TOTAL, INCLUDING UTO-AZTECAN	48	1	2	------	1	------	1
SOUTH AMERICAN							
GUARANI	5	1	------	------	------	------	------
QUECHAU	6	------	------	------	------	------	1
SOUTH AMERICAN INDIAN, OTHER	36	2	1	------	2	------	------
CAUCASIAN							
GEORGIAN	1	1	------	------	------	------	------
CAUCASIAN, OTHER	5	1	1	------	------	------	------
MISCELLANEOUS							
PAPUAN-AUSTRALIAN	9	------	------	------	------	------	------
CREOLES AND PIDGINS	24	1	------	------	------	------	2
OTHER LANGUAGES NOT INCLUDED IN ANY OF THE ABOVE CATEGORIES	1,296	356	27	22	18	6	69

TABLE A-33.—NUMBER OF SCIENTISTS, BY FOREIGN LANGUAGE AND FIELD, 1964—CONTINUED

LANGUAGE	SCIENTIFIC AND TECHNICAL FIELD						
	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELDS
URALIC-ALTAIC							
OSMANLI TURKISH (ISTANBUL AND ANATOLIAN)	18	19	6	25	6	17	27
OTHER TURKIC	------	------	------	3	------	9	4
MONGOLIAN	------	------	------	------	------	10	------
ALTAIC, OTHER	------	1	------	1	------	1	------
HUNGARIAN	124	66	9	61	10	17	68
FINNISH	33	19	2	24	8	8	28
ESTONIAN AND OTHER BALTO-FINNIC	10	2	4	2	1	7	5
URALIC, OTHER	------	------	------	1	------	3	2
EAST ASIAN							
SINO-TIBETAN							
MANDARIN CHINESE	17	15	33	98	22	41	44
OTHER CHINESE	194	25	3	6	18	7	103
THAI-LAO	9	2	1	8	3	22	6
BURMESE	4	1	1	3	------	11	1
TIBETAN	------	------	------	------	------	5	------
VIETNAMESE	4	------	2	1	3	11	1
CAMBODIAN (KHMER)	2	------	1	2	------	3	1
OTHER SOUTHEAST ASIAN	1	1	------	------	2	17	4
OTHER EAST ASIAN							
JAPANESE	347	115	41	150	43	53	199
KOREAN	25	7	8	26	6	3	17
MALAYO-POLYNESIAN							
INDONESIAN							
MALAY AND BAHASA INDONESIA	24	4	3	25	4	17	27
JAVANESE	------	1	------	------	------	2	------
SUDANESE	------	------	------	------	------	------	------
MADURESE	------	------	------	------	------	2	------
TAGALOG	8	3	------	5	1	9	7
VISAYAN	------	3	------	------	2	4	1
ILOCANO	1	------	------	------	------	2	1
MALAGASY	------	------	------	------	------	------	1
INDONESIAN, OTHER	8	5	2	2	------	11	4
OTHER MALAYO-POLYNESIAN							
POLYNESIAN	6	5	------	2	3	9	8
MELANESIAN	------	------	------	1	------	2	3
MICRONESIAN, OTHER	------	------	------	------	1	2	2
DRAVIDIAN							
TAMIL	5	2	3	1	------	6	4
TELUGU	5	------	4	3	1	5	1
MALAYALAM	4	------	------	------	1	1	------
KANNADA	1	------	------	2	------	1	3
DRAVIDIAN, OTHER	3	------	------	------	------	------	1
AMERICAN INDIAN							
NORTH AMERICAN							
NAVAHO	------	------	------	------	------	4	2
NORTH AMERICAN, OTHER	2	1	------	------	1	37	7
CENTRAL AMERICAN - TOTAL, INCLUDING UTO-AZTECAN	------	1	------	------	1	38	3
SOUTH AMERICAN							
GUARANI	------	------	------	------	------	4	------
QUECHAU	------	------	------	------	------	5	------
SOUTH AMERICAN INDIAN, OTHER	1	------	------	------	------	25	5
CAUCASIAN							
GEORGIAN	------	------	------	------	------	------	------
CAUCASIAN, OTHER	------	------	------	1	------	2	------
MISCELLANEOUS							
PAPUAN-AUSTRALIAN	------	------	------	------	------	7	2
CREOLES AND PIDGINS	1	1	------	1	------	14	4
OTHER LANGUAGES NOT INCLUDED IN ANY OF THE ABOVE CATEGORIES	284	195	5	54	30	65	165

NOTE - THESE DATA ARE BASED ON A MAXIMUM OF TWO FOREIGN LANGUAGES REPORTED BY 180,925 OF THE 223,854 TOTAL REGISTRANTS.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-34.—NUMBER OF SCIENTISTS, BY FOREIGN LANGUAGE AND PROFICIENCIES, 1964

LANGUAGE	TOTAL	PROFICIENCY								SOME KNOWLEDGE BUT CAN'T USE AS A MEDIUM OF COMMUNICATION	NO REPORT OF PROFICIENCY
		CAN PREPARE AND DELIVER LECTURES		CAN CONVERSE		HAVE FACILITY TO TRANSLATE TECHNICAL JOURNALS		CAN READ TECHNICAL ARTICLES FOR OWN USE			
		FLUENTLY	SUPERFICIALLY	FLUENTLY	PASSABLY	INTO ENGLISH	FROM ENGLISH	EASILY	WITH DIFFICULTY		
INDO-EUROPEAN											
INDIC											
HINDI-URDU	605	334	77	375	125	324	237	307	46	67	1
BENGALI	71	55	8	52	7	50	41	43	1	6	-------
GUJERATI	38	35	-------	36	-------	26	20	27	1	-------	-------
SINGHALESE	2	-------	2	2	-------	2	1	1	-------	-------	-------
MARATHI	23	17	3	16	4	16	11	16	2	-------	-------
ORIYA	2	2	-------	2	-------	2	-------	2	-------	-------	-------
PANJABI	28	21	1	24	-------	15	15	12	6	-------	-------
INDIC, OTHER	27	10	7	12	10	15	8	11	4	5	-------
IRANIAN											
PERSIAN	150	77	14	68	49	72	53	66	11	18	1
PASHTU	3	3	-------	3	-------	3	3	3	-------	-------	-------
KURDISH	5	2	-------	3	2	1	1	1	1	-------	-------
IRANIAN, OTHER	16	8	1	8	6	8	8	9	-------	-------	-------
BALTO-SLAVIC											
BALTIC (LITHUANIAN AND LETTISH)	479	288	54	329	99	293	235	283	24	18	-------
RUSSIAN	8,020	559	779	685	1,494	3,243	800	2,028	3,428	2,541	3
POLISH	1,725	562	337	789	678	886	492	807	315	204	1
CZECH AND SLOVAK	776	235	110	342	298	340	183	296	132	113	-------
SERBO-CROATIAN	226	115	24	122	64	125	88	114	32	19	-------
BULGARIAN	41	19	4	24	11	23	16	22	4	2	-------
UKRAINIAN	247	136	23	166	52	146	113	131	32	13	-------
SLAVIC, OTHER	110	33	13	50	39	36	20	32	18	17	-------
ROMANCE											
FRENCH	106,860	3,050	9,533	3,734	21,829	38,671	6,999	43,161	39,523	25,424	60
SPANISH	36,596	2,516	4,649	3,161	12,122	11,202	3,733	10,870	10,547	13,837	15
ITALIAN	4,890	755	950	1,120	2,220	2,376	855	2,266	1,184	925	1
PORTUGUESE	1,062	234	267	303	466	599	228	638	185	159	-------
RUMANIAN	92	51	11	54	24	60	39	57	16	4	-------
ROMANCE, OTHER	319	22	16	16	32	82	30	59	50	186	1
GERMANIC											
GERMAN	123,944	5,780	9,865	7,178	24,437	42,268	9,566	36,034	57,378	32,121	54
SWEDISH	1,193	188	191	280	533	507	163	502	280	224	-------
DUTCH	1,147	494	145	541	348	754	444	742	156	106	2
NORWEGIAN	756	170	124	230	333	352	155	353	143	135	1
DANISH	514	158	94	198	207	311	142	302	75	59	1
GERMANIC, OTHER	501	150	84	236	204	191	116	177	59	50	1
MISCELLANEOUS INDO-EUROPEAN											
CELTIC	31	15	3	18	6	16	12	15	1	5	-------
MODERN GREEK	1,141	424	200	612	252	535	352	469	189	195	-------
ARMENIAN	199	52	37	107	80	58	41	41	25	9	-------
ALBANIAN	14	4	2	8	3	4	3	3	1	3	-------
INDO-EUROPEAN, OTHER	177	17	21	12	37	56	23	38	31	89	-------
AFRO-ASIATIC											
SEMITIC											
ARABIC	725	328	48	344	169	310	252	286	33	175	1
HEBREW	1,439	470	300	555	495	746	405	620	287	289	2
AMHARIC	15	2	2	1	9	2	-------	1	2	5	-------
SEMITIC, OTHER	6	2	-------	4	2	1	1	2	-------	-------	-------
OTHER AFRO-ASIATIC											
BERBER	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
CUSHITIC	1	-------	-------	-------	1	-------	-------	-------	1	-------	-------
HAUSA AND AFRO-ASIATIC, OTHER	3	-------	1	-------	3	-------	-------	-------	-------	1	-------
AFRICAN											
NIGER-CONGO											
SWAHILI	45	3	5	5	29	6	2	5	6	9	-------
XHOSA AND ZULA	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
OTHER BANTU	7	3	1	4	3	2	3	2	1	-------	-------
AKAN (TWI AND FANTE)	6	2	-------	2	-------	1	1	-------	-------	-------	-------
IBO	3	3	-------	3	-------	2	2	3	-------	4	-------
YORUBA	2	-------	1	-------	2	1	1	1	-------	-------	-------
FULA (NI) (FULBE, FUL, PEUL, OR PEUHL)	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
NIGER-CONGO, OTHER	4	-------	-------	2	-------	1	1	1	-------	1	-------
OTHER SUB-SAHARAN AFRICAN	6	3	1	3	1	3	2	2	-------	1	-------

TABLE A-34.—NUMBER OF SCIENTISTS, BY FOREIGN LANGUAGE AND PROFICIENCIES, 1964—CONTINUED

LANGUAGE	TOTAL	PROFICIENCY								SOME KNOWLEDGE BUT CAN'T USE AS A MEDIUM OF COMMUNICATION	NO REPORT OF PROFICIENCY
		CAN PREPARE AND DELIVER LECTURES		CAN CONVERSE		HAVE FACILITY TO TRANSLATE TECHNICAL JOURNALS		CAN READ TECHNICAL ARTICLES FOR OWN USE			
		FLUENTLY	SUPERFICIALLY	FLUENTLY	PASSABLY	INTO ENGLISH	FROM ENGLISH	EASILY	WITH DIFFICULTY		
URALIC- ALTAIC											
OSMANLI TURKISH, (ISTANBUL AND ANATOLIAN)	276	91	30	99	86	91	69	87	43	77	-------
OTHER TURKIC	14	6	1	6	4	7	4	6	2	4	-------
MONGOLIAN	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
ALTAIC, OTHER	3	1	-------	1	1	1	1	1	2	-------	-------
HUNGARIAN	959	628	98	674	152	652	502	588	87	51	-------
FINNISH	345	89	75	158	139	166	74	150	77	39	1
ESTONIAN AND OTHER BALTO-FINNIC	108	92	6	95	3	91	85	83	2	1	-------
URALIC, OTHER	7	1	-------	1	3	1	1	1	-------	3	-------
EAST ASIAN											
SINO-TIBETAN											
MANDARIN CHINESE	467	308	37	286	79	280	212	265	30	44	-------
OTHER CHINESE	1,377	946	127	941	151	796	628	786	69	76	1
THAI-LAO	55	14	6	13	20	14	10	12	4	18	-------
BURMESE	20	11	1	14	2	10	8	9	1	4	-------
TIBETAN	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
VIETNAMESE	23	10	4	9	8	9	3	6	5	3	-------
CAMBODIAN (KHMER)	10	4	-------	3	4	3	3	3	-------	1	-------
OTHER SOUTHEAST ASIAN	7	3	1	-------	2	1	-------	1	-------	3	-------
OTHER EAST ASIAN											
JAPANESE	2,352	772	273	809	760	869	617	776	264	623	1
KOREAN	286	199	11	166	28	162	129	147	9	53	-------
MALAYO-POLYNESIAN											
INDONESIAN											
MALAY AND BAHASA INDONESIA	208	28	43	41	116	59	21	45	50	45	1
JAVANESE	3	2	1	3	-------	2	1	2	1	-------	-------
SUDANESE	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
MADURESE	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
TAGALOG	57	15	5	24	19	17	12	16	5	15	-------
VISAYAN	9	3	2	6	2	4	4	4	-------	1	-------
ILOCANO	5	-------	2	2	-------	-------	-------	-------	-------	1	2
MALAGASY	1	-------	-------	-------	-------	1	-------	-------	1	1	-------
INDONESIAN, OTHER	35	19	7	25	9	21	15	18	3	-------	-------
OTHER MALAYO-POLYNESIAN											
POLYNESIAN	29	7	4	11	10	5	3	6	3	8	-------
MELANESIAN	4	2	1	2	2	1	1	1	2	-------	-------
MICRONESIAN	3	1	1	-------	2	-------	-------	-------	-------	-------	-------
DRAVIDIAN											
TAMIL	51	34	3	33	10	29	23	27	-------	3	-------
TELUGU	37	33	3	23	3	22	15	17	-------	-------	-------
MALAYALAM	21	18	2	15	1	15	12	14	-------	1	-------
KANNADA	23	17	3	17	3	14	12	14	1	2	-------
DRAVIDIAN, OTHER	5	3	1	3	2	3	3	4	-------	-------	-------
AMERICAN INDIAN											
NORTH AMERICAN											
NAVAHO	9	1	1	1	5	1	1	-------	-------	3	-------
NORTH AMERICAN INDIAN, OTHER	19	-------	1	1	8	1	1	2	-------	10	-------
CENTRAL AMERICAN - TOTAL, INCLUDING UTO-AZTECAN	6	-------	1	1	2	-------	-------	-------	-------	3	-------
SOUTH AMERICAN											
GUARANI	1	-------	-------	-------	1	1	-------	-------	1	-------	-------
QUECHAU	1	1	-------	-------	-------	-------	-------	-------	-------	-------	-------
SOUTH AMERICAN INDIAN, OTHER	6	2	1	3	2	3	2	3	-------	1	-------
CAUCASIAN											
GEORGIAN	1	1	-------	1	-------	-------	-------	-------	-------	-------	-------
CAUCASIAN, OTHER	3	-------	1	1	-------	1	1	1	-------	2	-------
MISCELLANEOUS											
PAPUAN-AUSTRALIAN	1	-------	-------	-------	1	-------	-------	-------	-------	-------	-------
CREOLES AND PIDGINS	7	2	4	3	3	-------	-------	-------	-------	-------	-------
OTHER LANGUAGES NOT INCLUDED IN ANY OF THE ABOVE CATEGORIES	1,230	95	95	84	184	295	172	255	158	727	5

NOTE - THESE DATA ARE BASED ON A MAXIMUM OF TWO FOREIGN LANGUAGES REPORTED BY 179,543 OF THE 223,854 TOTAL REGISTRANTS.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-35.—NUMBER OF SCIENTISTS WITH KNOWLEDGE OF A FOREIGN AREA, BY FIELD, 1964

AREA	TOTAL	SCIENTIFIC AND TECHNICAL FIELD					
		CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES
ALL AREAS	223,854	63,053	17,907	5,510	26,698	17,411	9,526
ALL FOREIGN AREAS	47,495	9,938	4,861	2,248	4,721	3,285	1,536
AFRICA, GENERAL	209	14	44	8	4	4	11
UNITED ARAB REPUBLIC (EGYPT)	306	49	49	3	22	12	9
NORTHERN AFRICA	467	42	149	73	15	30	21
AFRICA, EAST CENTRAL	170	8	32	1	6	5	13
AFRICA, WEST CENTRAL	265	20	37	7	7	2	26
AFRICA, CENTRAL	54	4	13	------	1	1	4
AFRICA, EAST SOUTH CENTRAL	91	2	22	------	6	4	7
AFRICA, SOUTHERN	198	31	27	1	25	5	4
ASIA, GENERAL	74	9	11	5	6	3	1
CHINA	1,075	268	54	35	150	100	23
SOUTHEAST ASIA	573	39	58	39	36	27	18
INDIAN SUBCONTINENT	1,570	300	125	33	143	99	71
JAPAN	2,793	512	160	348	260	255	78
KOREA	711	136	36	57	57	79	31
FORMOSA (TAIWAN)	239	71	18	9	20	17	7
PHILIPPINES	736	113	81	51	45	57	38
NORTHERN ASIA	31	7	1	6	5	1	------
MONGOLIA	12	3	1	------	1	------	------
ASIA MINOR, GENERAL	5	1	1	------	------	2	------
ARABIAN PENINSULA	129	14	65	6	2	5	1
IRAN (PERSIA)	201	35	26	1	12	8	12
IRAQ (MESOPOTAMIA)	128	29	11	------	14	7	11
JORDAN, LEBANON, SYRIA	175	30	10	------	17	11	9
ISRAEL (PALESTINE)	518	100	19	6	75	70	7
TURKEY	307	37	69	15	32	12	11
AUSTRALIA, NEW ZEALAND, AND EAST INDIES, GENERAL	6	1	------	------	1	1	------
AUSTRALIA	683	124	112	16	74	31	29
NEW ZEALAND	224	35	44	9	17	13	11
NEW GUINEA AND ADJACENT ISLANDS	156	23	18	6	1	7	15
INDONESIA	196	27	43	1	16	4	16
PORTUGUESE TIMOR AND AMBENO	5	1	1	------	------	1	1
SARAWAK, BRUNEI, NORTH BORNEO	4	1	------	------	------	------	------
WESTERN EUROPE, GENERAL	3,305	700	212	221	326	214	93
SCANDINAVIAN PENINSULA	1,458	325	87	52	211	89	35
GREAT BRITAIN	5,251	1,365	164	255	773	388	89
BENELUX COUNTRIES	951	318	43	11	165	56	17
GERMANY	4,469	1,312	146	175	630	388	116
FRANCE, CORSICA, MONACO	2,067	439	91	57	262	237	20
AUSTRIA, LIECHTENSTEIN, SWITZERLAND	1,431	474	48	12	235	121	10
IBERIAN PENINSULA	327	50	34	41	26	20	7
ADRIATIC ISLANDS	476	121	23	7	43	26	13
ITALY	1,121	264	49	28	126	78	24
EASTERN EUROPE, GENERAL	50	8	4	5	5	1	------
RUSSIA	585	91	89	8	37	35	14
ESTONIA	174	78	4	------	21	15	9
POLAND	268	84	10	2	25	31	3
CZECHOSLAVAKIA	189	64	4	1	12	17	1
RUMANIA	52	17	5	1	5	6	1
BULGARIA	19	8	------	------	5	------	------
HUNGARY	368	162	10	4	41	23	7
ALBANIA	5	3	------	------	------	------	------
NORTH AMERICA (EXCEPT U.S.), GENERAL	70	9	23	7	2	1	3
CANADA, AND ST. PIERRE AND MIQUELON ISLANDS	3,750	829	682	101	295	305	178
GREENLAND	148	6	35	48	14	9	3
CENTRAL AMERICA	1,662	174	240	89	40	56	98
MEXICO	1,874	272	338	23	70	76	95
WEST INDIES FEDERATION	245	41	26	15	12	15	6
BAHAMAS	647	87	69	39	36	27	30
CUBA	397	81	77	9	22	20	22
SOUTH AMERICA, GENERAL	394	48	102	15	18	12	15
ARGENTINA AND PARAGUAY	314	76	40	2	18	15	10
BRAZIL	571	92	97	19	46	26	28
BOLIVIA, CHILE	282	36	65	5	21	7	15
COLUMBIA	298	36	101	3	4	14	13
ECUADOR, GALAPAGOS ISLANDS, PERU	399	38	107	16	15	10	23
BRITISH GUIANA, FRENCH GUIANA, SURINAM (DUTCH GUIANA)	43	1	11	1	4	1	------
URUGUAY	33	9	1	------	2	3	6
VENEZUELA	569	47	353	------	16	11	9
ANTARCTICA, FALKLAND ISLANDS	137	4	47	38	16	3	2
ARCTICA	33	1	6	14	4	1	1
MIDWAY ISLAND	1	------	------	------	------	------	------
PACIFIC ISLANDS NOT ELSEWHERE CLASSIFIED	420	51	32	97	26	30	24
ATLANTIC ISLANDS NOT ELSEWHERE CLASSIFIED	47	2	3	22	3	3	------
INDIAN OCEAN ISLANDS NOT ELSEWHERE CLASSIFIED	6	------	3	1	------	------	------
OTHER ISLANDS NOT ELSEWHERE CLASSIFIED	------	------	------	------	------	------	------
INTERNATIONAL WATERS	278	29	43	68	19	22	11
NO REPORT OF FOREIGN AREA	176,359	53,115	13,046	3,262	21,977	14,126	7,990

TABLE A-35.—NUMBER OF SCIENTISTS WITH KNOWLEDGE OF A FOREIGN AREA, BY FIELD, 1964—CONTINUED

AREA	SCIENTIFIC AND TECHNICAL FIELD						
	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELDS
ALL AREAS	27,135	16,804	2,843	12,143	2,703	1,351	20,770
ALL FOREIGN AREAS	7,332	3,084	607	3,990	1,126	934	3,833
AFRICA, GENERAL	41	12	3	38	16	2	12
UNITED ARAB REPUBLIC (EGYPT)	72	15	5	26	6	15	23
NORTHERN AFRICA	46	12	5	22	6	9	37
AFRICA, EAST CENTRAL	41	9	1	25	13	2	14
AFRICA, WEST CENTRAL	52	19	3	37	13	7	35
AFRICA, CENTRAL	8	2	1	3	12	2	3
AFRICA, EAST SOUTH CENTRAL	21	3	------	8	6	4	8
AFRICA, SOUTHERN	42	13	4	11	11	1	23
ASIA, GENERAL	10	6	1	16	2	------	4
CHINA	154	48	22	83	33	26	79
SOUTHEAST ASIA	108	40	6	89	22	35	56
INDIAN SUBCONTINENT	236	96	53	175	76	46	117
JAPAN	396	166	42	239	59	36	242
KOREA	116	52	14	58	16	1	58
FORMOSA (TAIWAN)	35	5	4	17	4	7	25
PHILIPPINES	124	52	18	42	16	12	87
NORTHERN ASIA	3	------	------	1	3	------	4
MONGOLIA	2	------	------	------	------	4	1
ASIA MINOR, GENERAL	1	------	------	------	------	------	------
ARABIAN PENINSULA	7	6	------	5	------	1	17
IRAN (PERSIA)	23	21	2	24	5	11	21
IRAQ (MESOPOTAMIA)	15	6	------	11	6	4	14
JORDAN, LEBANON, SYRIA	37	7	3	21	9	6	15
ISRAEL (PALESTINE)	60	57	12	46	18	11	37
TURKEY	22	24	6	35	7	15	22
AUSTRALIA, NEW ZEALAND, AND EAST INDIES, GENERAL	2	1	------	------	------	------	------
AUSTRALIA	137	36	10	56	9	------	49
NEW ZEALAND	50	16	1	9	8	2	9
NEW GUINEA AND ADJACENT ISLANDS	34	9	4	3	3	12	21
INDONESIA	28	6	1	23	1	11	19
PORTUGUESE TIMOR AND AMBENO	------	------	------	------	------	------	1
SARAWAK, BRUNEI, NORTH BORNEO	1	------	------	------	------	------	2
WESTERN EUROPE, GENERAL	411	254	36	459	69	24	286
SCANDINAVIAN PENINSULA	294	91	18	96	53	25	82
GREAT BRITAIN	962	374	72	360	87	25	337
BENELUX COUNTRIES	122	45	8	62	21	13	70
GERMANY	490	328	43	279	88	87	387
FRANCE, CURSICA, MONACO	297	179	21	161	50	66	187
AUSTRIA, LIECHTENSTEIN, SWITZERLAND	212	132	9	79	11	18	70
IBERIAN PENINSULA	46	17	4	26	2	34	20
ADRIATIC ISLANDS	71	27	11	68	15	25	26
ITALY	173	111	12	96	27	33	100
EASTERN EUROPE, GENERAL	5	2	------	17	3	------	------
RUSSIA	45	30	7	109	26	47	47
ESTONIA	12	8	4	4	5	10	4
POLAND	28	24	4	20	7	12	18
CZECHOSLAVAKIA	30	10	3	21	7	11	8
RUMANIA	6	2	------	4	------	2	3
BULGARIA	2	1	------	1	1	------	1
HUNGARY	51	17	2	21	4	6	20
ALBANIA	------	------	------	------	------	2	------
NORTH AMERICA (EXCEPT U.S.), GENERAL	14	1	------	1	------	------	9
CANADA, AND ST. PIERRE AND MIQUELON ISLANDS	491	259	40	217	35	6	312
GREENLAND	10	4	2	1	1	------	15
CENTRAL AMERICA	406	78	13	268	53	32	115
MEXICO	424	131	15	118	66	73	173
WEST INDIES FEDERATION	63	13	1	17	13	3	20
BAHAMAS	143	56	15	47	25	16	57
CUBA	60	24	5	26	9	4	38
SOUTH AMERICA, GENERAL	74	18	------	41	4	3	44
ARGENTINA AND PARAGUAY	51	11	4	42	7	5	33
BRAZIL	71	31	10	61	13	18	59
BOLIVIA, CHILE	35	13	4	38	9	6	28
COLUMBIA	47	6	3	27	8	15	21
ECUADOR, GALAPAGOS ISLANDS, PERU	78	9	1	28	11	18	45
BRITISH GUIANA, FRENCH GUIANA, SURINAM (DUTCH GUIANA)	11	1	2	6	2	1	2
URUGUAY	6	------	2	1	------	------	3
VENEZUELA	22	13	2	24	3	7	62
ANTARCTICA, FALKLAND ISLANDS	22	------	------	------	------	------	5
ARCTICA	1	------	------	------	------	------	5
MIDWAY ISLAND	------	1	------	------	------	------	------
PACIFIC ISLANDS NOT ELSEWHERE CLASSIFIED	74	18	9	12	7	5	35
ATLANTIC ISLANDS NOT ELSEWHERE CLASSIFIED	9	2	------	2	------	------	1
INDIAN OCEAN ISLANDS NOT ELSEWHERE CLASSIFIED	2	------	------	------	------	------	------
OTHER ISLANDS NOT ELSEWHERE CLASSIFIED	------	------	------	------	------	------	------
INTERNATIONAL WATERS	37	4	4	7	4	------	30
NO REPORT OF FOREIGN AREA	19,803	13,720	2,236	8,153	1,577	417	16,937

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-36.—NUMBER OF SCIENTISTS, BY SUBFIELD AND HIGHEST DEGREE, 1964

SCIENTIFIC AND TECHNICAL SUBFIELD	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ALL SUBFIELDS	223,854	79,372	5,925	61,222	72,364	2,878	2,093
ANALYTICAL CHEMISTRY	8,878	1,678	6	2,003	4,923	131	137
INORGANIC CHEMISTRY	5,192	1,588	2	1,066	2,398	59	79
ORGANIC CHEMISTRY	24,162	8,445	12	4,543	10,617	252	293
RELATED CHEMICAL SPECIALTIES	6,578	857	2	1,522	4,095	46	56
AGRICULTURAL AND FOOD CHEMISTRY	3,228	892	2	653	1,589	40	52
BIOCHEMISTRY	6,340	3,940	341	827	1,189	16	27
PHYSICAL CHEMISTRY	7,940	4,199	------	1,415	2,242	39	45
CHEMISTRY, OTHER	735	190	3	200	324	7	11
GEOCHEMISTRY	407	214	------	105	86	------	2
GEODESY	130	12	------	40	68	7	3
GEOLOGY	10,969	1,833	------	3,828	5,174	74	60
PALEONTOLOGY	906	340	------	328	219	14	5
SOLID-EARTH GEOPHYSICS	1,970	249	------	387	1,202	95	37
GEOGRAPHY	1,451	571	------	579	281	10	10
HYDROLOGY	795	106	------	202	460	24	3
OCEANOGRAPHY	615	197	1	203	206	4	4
ATMOSPHERIC, LITHOSPHERIC, AND HYDROSPHERIC SPECIALTIES, OTHER	664	56	------	157	405	26	20
ATMOSPHERIC DYNAMICS, CHEMISTRY AND PHYSICS	777	287	------	260	212	13	5
CLIMATOLOGY	244	50	------	76	89	20	9
SYNOPTIC METEOROLOGY	3,080	69	------	546	1,491	827	147
AREA SPECIALIZATIONS	1,230	59	------	200	660	256	55
METEOROLOGICAL INSTRUMENTATION	178	14	------	55	72	30	7
METEOROLOGY, OTHER	1	------	------	------	------	1	------
ACOUSTICS	1,381	338	1	424	570	29	19
ATOMIC AND MOLECULAR PHYSICS	1,772	956	------	435	373	------	8
ELECTROMAGNETISM	1,666	562	2	532	545	15	10
ELEMENTARY PARTICLES	1,349	760	1	319	266	------	3
MECHANICS	943	233	------	356	349	1	4
NUCLEAR PHYSICS	3,170	1,512	2	959	687	3	7
OPTICS	2,371	591	21	683	969	66	41
PHYSICS OF FLUIDS	1,781	870	------	510	389	5	7
SOLID STATE PHYSICS	4,151	1,953	1	1,199	963	16	19
THERMAL PHYSICS	635	221	------	200	206	3	5
OTHER PHYSICS SPECIALTIES	3,682	1,219	------	1,558	891	4	10
ASTRONOMY	889	423	1	232	224	4	5
ELECTRONICS	1,721	363	------	514	786	37	21
PHYSICS, OTHER	1,187	285	1	431	455	2	13
ALGEBRA	1,633	551	------	920	149	3	10
ANALYSIS AND FUNCTIONAL ANALYSIS	2,785	1,344	------	1,263	161	4	13
GEOMETRY	798	281	------	435	76	2	4
LOGIC	381	174	------	168	32	3	4
MATHEMATICS OF RESOURCE USE	4,237	773	2	1,669	1,679	60	54
NUMBER THEORY	330	170	------	128	29	1	2
NUMERICAL METHODS AND COMPUTATIONS	5,729	611	2	2,216	2,654	130	116
TOPOLOGY	637	372	------	237	23	1	4
PROBABILITY	433	214	------	165	47	4	3
MATHEMATICS, OTHER	448	113	1	263	67	2	2
AGRONOMY	1,168	593	------	354	205	11	5
ANIMAL HUSBANDRY	680	286	9	252	126	4	3
FISH AND WILDLIFE	1,407	164	1	562	661	10	9
FORESTRY	4,008	220	------	907	2,828	30	23
HORTICULTURE	872	453	------	271	142	3	3
SOIL SPECIALTIES	1,391	651	1	330	400	5	4
ANATOMY	1,006	591	173	157	82	1	2
BOTANY	2,244	1,353	1	625	260	1	4
ECOLOGY	1,147	508	4	411	223	------	1
ENTOMOLOGY	2,110	976	2	623	469	31	9
GENETICS	1,309	896	41	246	120	3	3
IMMUNOLOGY	732	416	210	47	53	2	4
MICROBIOLOGY	2,793	1,502	123	694	459	6	9
NUTRITION	1,196	830	51	203	101	7	4
PATHOLOGY	1,067	215	807	18	16	2	9
PHARMACOLOGY	1,345	920	259	73	87	1	5
PHYSIOLOGY	3,014	1,665	1,012	205	116	1	15
PHYTOPATHOLOGY	1,096	759	------	218	115	1	3
VIROLOGY	556	336	138	50	31	1	------
ZOOLOGY	2,785	1,394	24	834	512	11	10
OTHER BIO-MEDICAL SPECIALTIES	3,047	449	2,477	65	43	2	11
BIOPHYSICS	835	402	52	194	181	------	6
BIOLOGY, OTHER	853	143	34	365	304	1	6

TABLE A-36.—NUMBER OF SCIENTISTS, BY SUBFIELD AND HIGHEST DEGREE, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL SUBFIELD	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
CLINICAL PSYCHOLOGY	6,151	3,934	27	2,022	156	------	12
COUNSELING AND GUIDANCE	1,831	1,046	1	751	33	------	------
DEVELOPMENTAL PSYCHOLOGY	510	396	1	107	6	------	------
EDUCATIONAL PSYCHOLOGY	1,427	930	1	475	21	------	------
ENGINEERING PSYCHOLOGY	377	195	------	171	11	------	------
GENERAL PSYCHOLOGY	141	107	------	31	3	------	------
INDUSTRIAL AND PERSONNEL PSYCHOLOGY	1,367	733	------	531	98	2	3
PERSONALITY	479	393	------	77	9	------	------
SCHOOL PSYCHOLOGY	939	253	------	675	11	------	------
EXPERIMENTAL, COMPARATIVE, AND PHYSIOLOGICAL PSYCHOLOGY	1,912	1,548	20	302	40	------	2
PSYCHOMETRICS	467	337	------	121	8	------	1
SOCIAL PSYCHOLOGY	1,004	841	1	144	15	2	1
PSYCHOLOGY, OTHER	199	130	1	57	6	------	5
STATISTICS	2,843	804	3	1,133	810	43	50
GENERAL ECONOMIC THEORY	1,241	656	------	481	93	2	9
ECONOMIC HISTORY, HISTORY OF THOUGHT	265	196	------	57	9	------	3
ECONOMIC SYSTEMS, DEVELOPMENT AND PLANNING	864	432	------	314	102	4	12
ECONOMIC STATISTICS	483	227	------	180	70	------	6
MONETARY AND FISCAL THEORY AND INSTITUTIONS	978	606	------	287	70	6	9
INTERNATIONAL ECONOMICS	532	291	------	182	50	------	9
BUSINESS FINANCE AND ADMINISTRATION, MARKETING AND ACCOUNTING	4,742	1,123	------	1,653	1,830	64	72
INDUSTRIAL ORGANIZATIONS, GOVERNMENT AND BUSINESS, INDUSTRY STUDIES	804	377	1	252	159	9	6
LAND ECONOMICS	1,254	657	1	483	103	3	7
LABOR ECONOMICS	662	373	------	209	73	1	6
POPULATION, WELFARE PROGRAMS, STANDARDS OF LIVING	164	83	------	48	31	------	2
ECONOMICS, OTHER	154	70	------	58	23	1	2
APPLIED SOCIOLOGY	63	45	------	14	2	1	1
GENERAL SOCIOLOGY	265	200	------	58	5	1	1
METHODOLOGY	268	208	------	40	16	1	3
POPULATION	173	112	------	40	19	------	2
RURAL-URBAN SOCIOLOGY	340	293	------	43	3	------	1
SOCIAL CHANGE AND DEVELOPMENT	178	140	------	33	3	------	2
SOCIAL ORGANIZATION, STRUCTURE, AND INSTITUTIONS	1,064	914	8	131	9	------	2
SOCIAL PROBLEMS, SOCIAL DISORGANIZATION	314	240	1	66	6	------	1
SOCIOLOGY, OTHER	38	27	------	9	2	------	------
APPLICATION TO LANGUAGE TEACHING	392	158	1	172	47	------	14
DESCRIPTIVE LINGUISTICS	407	222	1	108	62	------	14
GENERAL LINGUISTICS	81	47	------	19	14	1	------
HISTORICAL AND COMPARATIVE LINGUISTICS	210	154	------	28	11	------	17
LANGUAGE IN RELATION TO OTHER FIELDS	158	103	------	43	10	------	2
LANGUAGE POLICIES	3	2	------	------	1	------	------
LITERACY AND WRITING SYSTEMS	16	3	------	6	7	------	------
MECHANIZED APPLICATIONS	27	10	------	12	4	------	1
PHONETICS	28	18	------	8	2	------	------
LINGUISTICS, OTHER	29	12	------	11	4	------	2
OTHER SPECIALTIES	6,158	1,376	29	2,698	1,980	40	35
ENGINEERING	14,612	1,893	5	4,167	8,191	177	179

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-37.—NUMBER OF SCIENTISTS, BY SUBFIELD AND AGE, 1964

SCIENTIFIC AND TECHNICAL SUBFIELD	TOTAL	AGE											NO REPORT OF AGE
		20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70 AND OVER	
ALL SUBFIELDS	223,854	8,247	34,102	39,896	40,148	35,831	24,726	16,921	11,308	6,966	3,428	1,992	289
ANALYTICAL CHEMISTRY	8,878	602	1,539	1,514	1,586	1,329	893	638	391	217	103	61	5
INORGANIC CHEMISTRY	5,192	354	857	789	782	728	527	435	321	216	110	70	3
ORGANIC CHEMISTRY	24,162	1,434	3,764	3,686	3,780	3,746	3,071	2,101	1,236	735	373	224	12
RELATED CHEMICAL SPECIALTIES	6,578	445	1,345	984	1,029	1,086	754	452	235	150	55	41	2
AGRICULTURAL AND FOOD CHEMISTRY	3,228	62	295	385	469	487	507	401	271	190	91	66	4
BIOCHEMISTRY	6,340	303	993	1,143	1,240	1,047	687	382	261	150	92	38	4
PHYSICAL CHEMISTRY	7,940	595	1,478	1,576	1,380	1,163	760	432	232	173	86	60	5
CHEMISTRY, OTHER	735	46	84	80	91	101	95	77	47	47	33	34	—
GEOCHEMISTRY	407	25	119	103	61	45	24	17	6	3	1	3	—
GEODESY	130	2	11	24	28	20	9	11	14	7	3	1	—
GEOLOGY	10,969	315	1,171	2,106	2,513	1,998	1,101	671	447	307	211	120	9
PALEONTOLOGY	906	74	181	204	128	104	61	45	48	30	22	9	—
SOLID-EARTH GEOPHYSICS	1,970	44	205	333	428	353	224	185	116	56	21	4	1
GEOGRAPHY	1,451	130	231	263	213	217	146	107	69	43	20	8	4
HYDROLOGY	795	6	58	88	144	142	104	93	101	31	16	11	1
OCEANOGRAPHY	615	34	107	112	125	112	58	30	23	5	7	1	1
ATMOSPHERIC, LITHOSPHERIC, AND HYDROSPHERIC SPECIALTIES, OTHER	664	28	58	84	112	107	72	47	52	50	31	20	3
ATMOSPHERIC DYNAMICS, CHEMISTRY AND PHYSICS	777	29	179	166	133	121	88	34	17	4	4	2	—
CLIMATOLOGY	244	6	15	32	35	53	45	24	19	9	4	2	—
SYNOPTIC METEOROLOGY	3,080	66	360	553	506	624	573	208	136	36	12	6	—
AREA SPECIALIZATIONS	1,230	16	96	191	177	337	240	102	52	12	5	1	1
METEOROLOGICAL INSTRUMENTATION	178	1	27	26	40	31	32	16	4	1	—	—	—
METEOROLOGY, OTHER	1	—	—	—	1	—	—	—	—	—	—	—	—
ACOUSTICS	1,381	30	240	261	237	212	146	107	63	61	16	8	—
ATOMIC AND MOLECULAR PHYSICS	1,772	134	559	472	226	177	94	47	33	19	7	4	—
ELECTROMAGNETISM	1,666	70	355	349	287	248	122	96	62	43	19	14	1
ELEMENTARY PARTICLES	1,349	118	524	319	176	111	62	20	10	4	3	1	1
MECHANICS	943	48	208	167	154	136	83	49	52	27	13	5	1
NUCLEAR PHYSICS	3,170	178	771	769	569	485	217	92	47	32	7	2	1
OPTICS	2,371	86	498	426	426	335	215	158	116	74	27	10	—
PHYSICS OF FLUIDS	1,781	81	424	412	351	280	119	58	34	13	9	—	—
SOLID STATE PHYSICS	4,151	218	1,135	989	808	534	212	109	73	57	13	2	1
THERMAL PHYSICS	635	37	185	149	95	77	28	17	20	19	7	1	—
OTHER PHYSICS SPECIALTIES	3,682	323	920	691	485	458	224	219	157	125	60	18	2
ASTRONOMY	889	68	239	189	139	78	50	39	41	29	10	7	—
ELECTRONICS	1,721	34	338	361	305	280	151	104	85	47	8	7	1
PHYSICS, OTHER	1,187	143	290	176	151	117	70	76	72	54	25	6	7
ALGEBRA	1,633	41	396	343	258	174	143	123	86	49	15	4	1
ANALYSIS AND FUNCTIONAL ANALYSIS	2,785	70	621	606	420	321	222	174	159	115	55	22	—
GEOMETRY	798	14	126	143	110	76	88	65	80	47	39	10	—
LOGIC	381	5	78	98	70	58	37	12	13	7	1	2	—
MATHEMATICS OF RESOURCE USE	4,237	53	687	921	952	691	405	280	140	79	23	5	1
NUMBER THEORY	330	9	74	73	50	43	22	22	20	9	5	3	—
NUMERICAL METHODS AND COMPUTATIONS	5,729	106	1,338	1,784	1,313	702	281	129	43	20	6	3	4
TOPOLOGY	637	29	222	159	98	57	39	11	8	8	6	—	—
PROBABILITY	433	11	98	116	90	56	26	17	10	5	2	2	—
MATHEMATICS, OTHER	448	5	63	61	78	74	38	49	42	20	13	5	—
AGRONOMY	1,168	6	105	187	188	237	165	118	74	46	22	13	7
ANIMAL HUSBANDRY	680	10	79	102	99	121	106	51	49	38	20	3	2
FISH AND WILDLIFE	1,407	24	235	273	275	242	171	109	44	22	4	3	5
FORESTRY	4,008	73	663	763	690	595	445	364	253	95	32	14	21
HORTICULTURE	872	8	69	134	114	163	136	84	78	33	34	14	5
SOIL SPECIALTIES	1,391	12	128	241	208	263	218	148	92	46	21	8	6
ANATOMY	1,006	8	81	115	184	162	120	117	96	71	33	17	2
BOTANY	2,244	36	331	451	346	291	224	183	165	112	63	33	9
ECOLOGY	1,147	24	241	251	210	139	108	86	40	29	9	4	6
ENTOMOLOGY	2,110	15	170	355	393	310	274	220	181	112	40	33	7
GENETICS	1,309	32	202	265	262	215	120	82	49	44	18	13	7
IMMUNOLOGY	732	11	57	131	178	137	81	58	31	23	18	6	1
MICROBIOLOGY	2,793	33	271	376	564	499	390	285	179	122	46	19	9
NUTRITION	1,196	9	96	188	213	211	153	139	76	47	33	24	7
PATHOLOGY	1,067	2	26	122	216	221	169	116	89	64	30	12	—
PHARMACOLOGY	1,345	4	75	201	318	270	201	128	82	42	16	7	1
PHYSIOLOGY	3,014	25	220	501	703	601	370	256	183	91	44	17	3
PHYTOPATHOLOGY	1,096	19	130	208	210	155	135	72	85	44	21	15	2
VIROLOGY	556	5	27	89	162	110	59	52	35	13	4	—	—
ZOOLOGY	2,785	77	480	547	523	340	270	182	173	110	51	20	12
OTHER BIO-MEDICAL SPECIALTIES	3,047	2	161	448	568	568	445	339	244	179	72	20	1
BIOPHYSICS	835	32	146	143	159	167	90	42	37	13	5	—	1
BIOLOGY, OTHER	853	17	86	122	138	118	123	79	82	44	28	7	9

TABLE A-37.—NUMBER OF SCIENTISTS, BY SUBFIELD AND AGE, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL SUBFIELD	TOTAL	AGE											NO REPORT OF AGE
		20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70 AND OVER	
CLINICAL PSYCHOLOGY	6,151	5	396	1,039	1,490	1,281	690	526	326	194	114	74	16
COUNSELING AND GUIDANCE	1,831	4	89	233	307	299	299	256	167	113	32	29	3
DEVELOPMENTAL PSYCHOLOGY	510	1	33	82	99	88	64	40	47	23	16	15	2
EDUCATIONAL PSYCHOLOGY	1,427	1	62	168	270	253	213	181	129	75	37	35	3
ENGINEERING PSYCHOLOGY	377	1	32	77	97	100	47	16	2	5	------	------	------
GENERAL PSYCHOLOGY	141	------	5	11	17	23	21	8	16	18	8	13	1
INDUSTRIAL AND PERSONNEL PSYCHOLOGY	1,367	5	72	182	289	329	191	151	83	43	13	9	------
PERSONALITY	479	2	42	103	121	87	55	26	15	15	8	5	------
SCHOOL PSYCHOLOGY	939	1	46	163	231	179	108	88	69	26	20	7	1
EXPERIMENTAL, COMPARATIVE, AND PHYSIOLOGICAL PSYCHOLOGY	1,912	11	306	469	459	325	142	80	56	35	15	14	------
PSYCHOMETRICS	467	1	45	84	101	95	62	43	17	12	2	4	1
SOCIAL PSYCHOLOGY	1,004	3	83	204	234	200	123	69	40	21	16	9	2
PSYCHOLOGY, OTHER	199	------	9	23	24	40	32	9	17	9	9	23	4
STATISTICS	2,843	22	377	572	543	462	379	228	151	80	16	12	1
GENERAL ECONOMIC THEORY	1,241	22	127	220	208	207	149	126	68	52	31	27	4
ECONOMIC HISTORY, HISTORY OF THOUGHT	265	4	27	26	38	53	23	33	19	14	15	13	------
ECONOMIC SYSTEMS, DEVELOPMENT AND PLANNING	864	10	86	152	143	149	116	83	58	28	29	9	1
ECONOMIC STATISTICS	483	9	81	101	79	76	49	41	24	9	7	6	1
MONETARY AND FISCAL THEORY AND INSTITUTIONS	978	13	109	144	140	162	122	74	76	53	52	30	3
INTERNATIONAL ECONOMICS	532	7	36	83	87	87	79	58	46	21	18	8	2
BUSINESS FINANCE AND ADMINISTRATION, MARKETING AND ACCOUNTING	4,742	61	420	723	802	887	717	449	307	203	103	68	2
INDUSTRIAL ORGANIZATIONS, GOVERNMENT AND BUSINESS, INDUSTRY STUDIES	804	5	60	117	117	136	118	88	69	46	27	21	------
LAND ECONOMICS	1,254	13	125	220	187	231	156	125	78	46	40	29	4
LABOR ECONOMICS	662	4	45	75	77	114	116	91	62	45	18	13	2
POPULATION, WELFARE PROGRAMS, STANDARDS OF LIVING	164	------	7	22	25	25	21	20	19	13	7	4	1
ECONOMICS, OTHER	154	------	7	22	31	24	14	22	9	8	6	10	1
APPLIED SOCIOLOGY	63	------	------	3	11	18	7	12	5	2	2	3	------
GENERAL SOCIOLOGY	265	------	4	19	38	52	52	39	23	16	12	10	------
METHODOLOGY	268	1	18	50	71	45	44	15	13	7	3	1	------
POPULATION	173	1	4	23	27	23	27	27	16	14	7	4	------
RURAL-URBAN SOCIOLOGY	340	------	11	41	66	61	45	45	24	20	12	15	------
SOCIAL CHANGE AND DEVELOPMENT	178	------	7	22	30	36	25	21	15	8	6	7	1
SOCIAL ORGANIZATION, STRUCTURE, AND INSTITUTIONS	1,064	4	37	154	210	220	171	114	60	55	21	18	------
SOCIAL PROBLEMS,SOCIAL DISORGANIZATION	314	------	11	39	54	58	39	33	32	16	19	13	------
SOCIOLOGY, OTHER	38	------	------	4	6	4	4	5	3	6	3	2	1
APPLICATION TO LANGUAGE TEACHING	392	5	31	69	87	77	51	31	26	13	2	------	------
DESCRIPTIVE LINGUISTICS	407	12	64	82	84	58	29	31	18	12	4	10	3
GENERAL LINGUISTICS	81	3	12	15	13	12	5	8	6	3	3	------	1
HISTORICAL AND COMPARATIVE LINGUISTICS	210	4	17	36	35	30	23	23	24	11	4	3	------
LANGUAGE IN RELATION TO OTHER FIELDS	158	2	22	22	24	23	20	15	12	10	6	------	2
LANGUAGE POLICIES	3	------	------	------	1	------	------	------	1	------	1	------	------
LITERACY AND WRITING SYSTEMS	16	------	2	2	6	2	1	2	1	------	------	------	------
MECHANIZED APPLICATIONS	27	------	7	5	7	7	1	------	------	------	------	------	------
PHONETICS	28	------	2	6	8	4	1	3	3	1	------	------	------
LINGUISTICS, OTHER	29	------	5	2	9	2	1	7	1	2	------	------	------
OTHER SPECIALTIES	6,158	214	925	1,057	1,078	856	632	539	422	234	119	67	15
ENGINEERING	14,612	784	2,555	2,241	2,297	2,465	1,704	1,129	652	454	192	127	12

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-38.—NUMBER OF SCIENTISTS, BY SUBFIELD AND TYPE OF EMPLOYER, 1964

SCIENTIFIC AND TECHNICAL SUBFIELD	TOTAL	TYPE OF EMPLOYER								NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER		
ALL SUBFIELDS	223,854	77,727	23,405	7,472	5,522	8,722	84,421	4,277	1,434	9,617	1,257
ANALYTICAL CHEMISTRY	8,878	1,692	875	233	115	183	5,174	63	82	423	38
INORGANIC CHEMISTRY	5,192	1,471	282	153	59	81	2,724	59	28	309	26
ORGANIC CHEMISTRY	24,162	3,739	904	122	176	340	17,291	208	76	1,207	99
RELATED CHEMICAL SPECIALTIES	6,578	478	288	52	68	67	5,299	66	27	215	18
AGRICULTURAL AND FOOD CHEMISTRY	3,228	414	372	97	13	48	2,046	66	13	150	9
BIOCHEMISTRY	6,340	3,095	672	170	121	709	1,039	76	38	385	35
PHYSICAL CHEMISTRY	7,940	2,482	574	45	88	232	3,972	41	40	405	61
CHEMISTRY, OTHER	735	245	37	16	8	19	314	10	7	74	5
GEOCHEMISTRY	407	185	67	6	------	24	70	1	5	45	4
GEODESY	130	22	54	5	27	------	14	------	------	8	------
GEOLOGY	10,969	1,679	1,085	451	94	62	6,177	692	42	585	102
PALEONTOLOGY	906	428	69	27	10	29	223	5	10	88	17
SOLID-EARTH GEOPHYSICS	1,970	214	156	18	22	16	1,428	37	5	56	18
GEOGRAPHY	1,451	1,018	124	41	33	24	61	5	12	120	13
HYDROLOGY	795	104	526	68	4	13	51	4	3	20	2
OCEANOGRAPHY	615	253	187	21	23	38	68	------	6	13	6
ATMOSPHERIC, LITHOSPHERIC, AND HYDROSPHERIC SPECIALTIES, OTHER	664	120	57	21	28	10	308	77	4	27	12
ATMOSPHERIC DYNAMICS, CHEMISTRY, AND PHYSICS	777	255	252	6	38	76	123	2	2	19	4
CLIMATOLOGY	244	44	117	5	50	5	15	1	1	5	1
SYNOPTIC METEOROLOGY	3,080	142	977	23	1,528	48	250	11	6	88	7
AREA SPECIALIZATIONS	1,230	64	438	44	475	14	164	4	6	19	2
METEOROLOGICAL INSTRUMENTATION	178	22	73	------	22	9	42	------	------	9	1
METEOROLOGY, OTHER	1	------	------	------	------	------	------	------	1	------	------
ACOUSTICS	1,381	317	296	6	23	54	623	28	3	29	2
ATOMIC AND MOLECULAR PHYSICS	1,772	967	183	8	24	53	404	1	2	120	10
ELECTROMAGNETISM	1,666	474	281	4	27	66	739	12	1	60	2
ELEMENTARY PARTICLES	1,349	975	55	9	13	97	76	3	------	110	11
MECHANICS	943	310	185	5	14	18	358	7	------	45	1
NUCLEAR PHYSICS	3,170	1,544	273	18	122	157	902	8	7	130	9
OPTICS	2,371	452	342	4	44	85	1,315	42	------	77	10
PHYSICS OF FLUIDS	1,781	705	266	8	32	97	603	7	1	61	1
SOLID STATE PHYSICS	4,151	1,507	344	6	27	114	1,922	13	2	197	19
THERMAL PHYSICS	635	246	113	2	7	17	209	2	2	33	4
OTHER PHYSICS SPECIALTIES	3,682	2,769	143	7	36	64	365	5	4	276	13
ASTRONOMY	889	430	150	4	23	100	106	3	------	71	2
ELECTRONICS	1,721	340	180	2	46	43	1,042	25	2	40	1
PHYSICS, OTHER	1,187	575	102	6	35	46	290	10	1	101	21
ALGEBRA	1,633	1,318	38	20	16	11	105	3	4	104	14
ANALYSIS AND FUNCTIONAL ANALYSIS	2,785	2,205	88	34	40	30	267	7	6	93	15
GEOMETRY	798	702	12	9	2	11	29	2	1	27	3
LOGIC	381	278	1	3	1	10	72	2	2	10	2
MATHEMATICS OF RESOURCE USE	4,237	499	376	64	108	369	2,631	60	22	86	22
NUMBER THEORY	330	261	18	5	2	6	15	------	1	18	4
NUMERICAL METHODS AND COMPUTATIONS	5,729	841	534	49	94	349	3,620	39	36	152	15
TOPOLOGY	637	536	5	9	5	17	22	------	6	36	1
PROBABILITY	433	229	25	3	8	20	129	1	2	13	3
MATHEMATICS, OTHER	448	337	16	15	1	5	45	1	3	23	2
AGRONOMY	1,168	601	222	58	------	19	213	21	4	19	11
ANIMAL HUSBANDRY	680	476	48	16	2	8	90	23	5	9	3
FISH AND WILDLIFE	1,407	178	477	664	7	16	26	12	3	17	7
FORESTRY	4,008	395	1,920	621	34	32	827	92	13	52	22
HORTICULTURE	872	589	84	28	------	9	104	16	3	31	8
SOIL SPECIALTIES	1,391	594	544	53	4	15	122	10	8	32	9
ANATOMY	1,006	828	30	13	11	48	28	20	3	21	4
BOTANY	2,244	1,669	224	53	5	61	74	6	10	130	12
ECOLOGY	1,147	788	152	85	7	17	31	4	6	51	6
ENTOMOLOGY	2,110	858	542	190	72	40	271	36	21	61	19
GENETICS	1,309	920	120	35	9	45	82	3	11	74	10
IMMUNOLOGY	732	376	88	27	26	107	63	21	5	19	------
MICROBIOLOGY	2,793	1,225	376	150	101	210	593	22	20	75	21
NUTRITION	1,196	669	101	20	15	44	283	20	9	26	9
PATHOLOGY	1,067	544	67	36	62	233	52	52	5	11	5
PHARMACOLOGY	1,345	573	97	46	34	69	476	22	3	19	6
PHYSIOLOGY	3,014	2,040	256	53	95	275	144	63	18	59	11
PHYTOPATHOLOGY	1,096	625	252	65	3	16	84	4	5	32	10
VIROLOGY	556	249	63	29	32	52	104	2	4	20	1
ZOOLOGY	2,785	2,122	176	132	24	81	59	8	30	135	18
OTHER BIO-MEDICAL SPECIALTIES	3,047	1,369	198	207	267	378	189	343	40	31	25
BIOPHYSICS	835	411	116	23	25	76	110	5	2	60	7
BIOLOGY, OTHER	853	606	58	39	2	23	77	16	10	15	7

TABLE A-38.—NUMBER OF SCIENTISTS, BY SUBFIELD AND TYPE OF EMPLOYER, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL SUBFIELD	TOTAL	TYPE OF EMPLOYER								NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER		
CLINICAL PSYCHOLOGY	6,151	1,814	629	1,332	88	874	109	890	107	260	48
COUNSELING AND GUIDANCE	1,831	1,133	176	144	2	178	36	70	26	54	12
DEVELOPMENTAL PSYCHOLOGY	510	344	15	30	6	47	2	10	9	44	3
EDUCATIONAL PSYCHOLOGY	1,427	1,085	28	89	5	55	48	16	40	51	10
ENGINEERING PSYCHOLOGY	377	28	53	3	25	35	225	1	2	3	2
GENERAL PSYCHOLOGY	141	108	3	4	2	6	—	1	—	13	4
INDUSTRIAL AND PERSONNEL PSYCHOLOGY	1,367	257	117	44	22	74	693	90	28	34	8
PERSONALITY	479	330	34	32	7	32	8	13	4	16	3
SCHOOL PSYCHOLOGY	939	729	9	96	—	12	5	4	32	43	9
EXPERIMENTAL, COMPARATIVE, AND PHYSIOLOGICAL PSYCHOLOGY	1,912	1,303	163	57	46	120	125	13	12	65	8
PSYCHOMETRICS	467	243	75	22	5	46	53	7	4	11	1
SOCIAL PSYCHOLOGY	1,004	714	64	31	19	74	47	17	7	28	3
PSYCHOLOGY, OTHER	199	74	12	17	3	21	11	12	3	36	10
STATISTICS	2,843	778	568	122	31	139	1,055	25	38	66	21
GENERAL ECONOMIC THEORY	1,241	786	73	26	6	55	197	6	20	60	12
ECONOMIC HISTORY, HISTORY OF THOUGHT	265	214	9	4	2	6	6	1	1	20	2
ECONOMIC SYSTEMS, DEVELOPMENT AND PLANNING	864	387	168	47	5	72	109	12	26	30	8
ECONOMIC STATISTICS	483	253	83	11	2	32	63	1	8	19	11
MONETARY AND FISCAL THEORY AND INSTITUTIONS	978	570	98	38	2	34	113	8	54	57	4
INTERNATIONAL ECONOMICS	532	243	112	9	6	23	64	10	30	30	5
BUSINESS FINANCE AND ADMINISTRATION, MARKETING AND ACCOUNTING	4,742	1,111	126	15	39	96	3,045	98	28	158	26
INDUSTRIAL ORGANIZATIONS, GOVERNMENT AND BUSINESS, INDUSTRY STUDIES	804	313	122	30	7	44	225	21	10	26	6
LAND ECONOMICS	1,254	684	311	38	9	33	78	23	14	48	16
LABOR ECONOMICS	662	377	112	46	2	34	27	9	13	39	3
POPULATION, WELFARE PROGRAMS, STANDARDS OF LIVING	164	69	40	14	—	17	12	1	2	7	2
ECONOMICS, OTHER	154	54	20	6	3	19	28	5	1	16	2
APPLIED SOCIOLOGY	63	40	4	4	1	8	1	2	—	3	—
GENERAL SOCIOLOGY	265	233	2	6	—	5	3	2	—	13	1
METHODOLOGY	268	179	22	11	—	20	27	1	2	6	—
POPULATION	173	91	32	21	1	11	3	—	5	9	—
RURAL-URBAN SOCIOLOGY	340	265	22	8	1	20	2	3	3	13	3
SOCIAL CHANGE AND DEVELOPMENT	178	133	12	2	—	12	5	1	4	8	1
SOCIAL ORGANIZATION, STRUCTURE, AND INSTITUTIONS	1,064	874	28	30	4	70	13	7	7	29	2
SOCIAL PROBLEMS, SOCIAL DISORGANIZATION	314	238	14	32	3	13	1	1	—	11	1
SOCIOLOGY, OTHER	38	27	1	1	—	1	—	3	—	5	—
APPLICATION TO LANGUAGE TEACHING	392	257	50	11	—	7	21	—	3	30	3
DESCRIPTIVE LINGUISTICS	407	262	5	4	—	60	10	3	3	47	13
GENERAL LINGUISTICS	81	54	3	2	1	3	9	—	2	7	—
HISTORICAL AND COMPARATIVE LINGUISTICS	210	183	5	4	—	1	—	—	—	16	1
LANGUAGE IN RELATION TO OTHER FIELDS	158	122	4	4	—	5	6	—	2	15	—
LANGUAGE POLICIES	3	—	1	—	—	1	—	1	—	—	—
LITERACY AND WRITING SYSTEMS	16	5	1	—	—	8	1	—	—	—	1
MECHANIZED APPLICATIONS	27	6	1	—	—	2	14	—	—	4	—
PHONETICS	28	22	—	—	—	2	1	—	—	3	—
LINGUISTICS, OTHER	29	19	2	—	—	1	2	—	—	4	1
OTHER SPECIALTIES	6,158	3,447	411	182	131	261	1,213	95	62	327	29
ENGINEERING	14,612	1,581	1,142	276	447	263	9,861	264	62	652	64

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-39.—NUMBER OF SCIENTISTS, BY SUBFIELD AND WORK ACTIVITY, 1964

SCIENTIFIC AND TECHNICAL SUBFIELD	TOTAL	WORK ACTIVITY								NOT EMPLOYED	NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER		
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D					
ALL SUBFIELDS	223,854	77,699	35,781	30,280	46,255	24,568	41,209	16,582	26,301	9,617	6,191
ANALYTICAL CHEMISTRY	8,878	3,192	1,047	1,768	1,410	758	888	2,347	374	423	244
INORGANIC CHEMISTRY	5,192	1,813	882	716	1,066	680	887	800	192	309	125
ORGANIC CHEMISTRY	24,162	10,800	4,015	4,833	5,963	4,284	1,715	3,042	832	1,207	603
RELATED CHEMICAL SPECIALTIES	6,578	2,339	179	649	1,467	728	252	1,949	239	215	117
AGRICULTURAL AND FOOD CHEMISTRY	3,228	931	276	517	1,035	633	130	742	130	150	110
BIOCHEMISTRY	6,340	3,963	3,421	495	764	496	657	206	209	385	156
PHYSICAL CHEMISTRY	7,940	4,477	,604	1,577	1,246	1,052	1,080	327	204	405	201
CHEMISTRY, OTHER	735	130	48	52	174	109	189	72	62	74	34
GEOCHEMISTRY	407	214	169	44	30	26	73	10	22	45	13
GEODESY	130	28	11	17	53	23	14	2	22	8	3
GEOLOGY	10,969	1,230	736	490	1,510	493	1,133	796	5,375	585	340
PALEONTOLOGY	906	272	202	70	51	24	243	17	192	88	43
SOLID-EARTH GEOPHYSICS	1,970	329	160	164	371	115	60	29	1,084	56	41
GEOGRAPHY	1,451	151	88	62	122	56	836	15	165	120	42
HYDROLOGY	795	255	104	151	223	108	43	26	207	20	21
OCEANOGRAPHY	615	309	208	94	125	87	73	4	70	13	21
ATMOSPHERIC, LITHOSPHERIC, AND HYDROSPHERIC SPECIALTIES, OTHER	664	38	18	20	129	32	70	40	255	27	105
ATMOSPHERIC DYNAMICS, CHEMISTRY, AND PHYSICS	777	516	358	153	108	92	59	2	44	19	29
CLIMATOLOGY	244	66	23	43	50	20	28	1	85	5	9
SYNOPTIC METEOROLOGY	3,080	271	91	180	699	112	94	27	1,797	88	104
AREA SPECIALIZATIONS	1,230	134	38	93	344	74	35	34	637	19	27
METEOROLOGICAL INSTRUMENTATION	178	56	9	36	64	48	6	3	33	9	7
METEOROLOGY, OTHER	1	------	------	------	------	------	------	1	------	------	------
ACOUSTICS	1,381	721	223	338	378	278	128	15	92	29	18
ATOMIC AND MOLECULAR PHYSICS	1,772	1,124	944	154	122	92	343	6	19	120	38
ELECTROMAGNETISM	1,666	926	301	463	330	266	239	17	62	60	32
ELEMENTARY PARTICLES	1,349	923	813	62	96	74	164	2	15	110	39
MECHANICS	943	428	115	193	182	149	228	12	33	45	15
NUCLEAR PHYSICS	3,170	1,801	1,088	490	553	442	468	27	115	130	76
OPTICS	2,371	1,391	354	642	501	381	205	22	110	77	65
PHYSICS OF FLUIDS	1,781	1,201	709	422	251	231	197	13	25	61	33
SOLID STATE PHYSICS	4,151	2,832	1,931	710	483	415	476	27	47	197	89
THERMAL PHYSICS	635	387	218	103	74	55	100	8	21	33	12
OTHER PHYSICS SPECIALTIES	3,682	912	655	189	211	114	2,132	9	78	276	64
ASTRONOMY	889	517	387	92	99	74	149	2	20	71	31
ELECTRONICS	1,721	814	110	282	515	365	198	45	84	40	25
PHYSICS, OTHER	1,187	368	192	104	223	147	341	16	54	101	84
ALGEBRA	1,633	259	182	56	86	27	1,071	13	61	104	39
ANALYSIS AND FUNCTIONAL ANALYSIS	2,785	695	475	180	166	89	1,637	24	88	93	82
GEOMETRY	798	103	78	21	36	12	589	6	17	27	20
LOGIC	381	127	86	19	28	13	195	3	10	10	8
MATHEMATICS OF RESOURCE USE	4,237	1,257	151	813	1,571	875	247	439	557	86	80
NUMBER THEORY	330	60	46	13	21	11	204	7	13	18	7
NUMERICAL METHODS AND COMPUTATIONS	5,729	2,625	318	936	1,424	831	330	564	531	152	103
TOPOLOGY	637	228	209	12	25	10	307	2	23	36	16
PROBABILITY	433	185	92	82	55	35	139	14	17	13	10
MATHEMATICS, OTHER	448	48	22	17	32	13	304	8	23	23	10
AGRONOMY	1,168	589	138	443	268	159	129	55	59	19	49
ANIMAL HUSBANDRY	680	204	60	139	176	104	191	10	56	9	34
FISH AND WILDLIFE	1,407	459	166	281	675	349	84	16	111	17	45
FORESTRY	4,008	432	101	295	2,709	286	203	109	369	52	134
HORTICULTURE	872	410	71	334	176	113	146	9	53	31	47
SOIL SPECIALTIES	1,391	635	311	320	283	125	140	58	187	32	56
ANATOMY	1,006	233	204	29	108	51	549	2	64	21	29
BOTANY	2,244	728	606	118	166	85	1,082	16	59	130	63
ECOLOGY	1,147	320	227	91	141	75	570	3	39	51	23
ENTOMOLOGY	2,110	883	440	431	482	212	352	89	152	61	91
GENETICS	1,309	716	579	136	117	90	347	2	18	74	35
IMMUNOLOGY	732	470	374	96	87	64	92	11	33	19	20
MICROBIOLOGY	2,793	1,132	709	404	562	322	654	93	198	75	79
NUTRITION	1,196	568	326	236	296	225	168	41	56	26	41
PATHOLOGY	1,067	431	291	140	154	87	178	5	215	11	73
PHARMACOLOGY	1,345	644	409	229	359	300	209	17	57	19	40
PHYSIOLOGY	3,014	1,629	1,196	431	305	233	764	4	157	59	96
PHYTOPATHOLOGY	1,096	731	422	305	122	89	95	16	56	32	44
VIROLOGY	556	353	272	80	94	68	55	3	13	20	18
ZOOLOGY	2,785	669	579	87	257	133	1,548	7	94	135	75
OTHER BIO-MEDICAL SPECIALTIES	3,047	942	327	612	580	336	515	11	794	31	174
BIOPHYSICS	835	435	344	80	156	72	89	18	45	60	32
BIOLOGY, OTHER	853	96	63	26	124	50	518	10	37	15	53

TABLE A-39.—NUMBER OF SCIENTISTS, BY SUBFIELD AND WORK ACTIVITY, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL SUBFIELD	TOTAL	WORK ACTIVITY								NOT EMPLOYED	NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER		
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D					
CLINICAL PSYCHOLOGY	6,151	1,100	126	967	692	153	699	1	3,270	260	129
COUNSELING AND GUIDANCE	1,831	125	10	112	349	56	458	1	815	54	29
DEVELOPMENTAL PSYCHOLOGY	510	127	85	40	58	25	214	------	55	44	12
EDUCATIONAL PSYCHOLOGY	1,427	287	35	243	390	108	514	1	151	51	33
ENGINEERING PSYCHOLOGY	377	201	13	140	138	121	13	------	17	3	5
GENERAL PSYCHOLOGY	141	13	9	3	14	3	91	------	6	13	4
INDUSTRIAL AND PERSONNEL PSYCHOLOGY	1,367	243	22	207	558	212	152	8	346	34	26
PERSONALITY	479	154	96	55	52	32	204	------	39	16	14
SCHOOL PSYCHOLOGY	939	410	2	406	96	15	62	------	298	43	30
EXPERIMENTAL, COMPARATIVE, AND PHYSIOLOGICAL PSYCHOLOGY	1,912	891	719	160	192	148	672	------	58	65	34
PSYCHOMETRICS	467	197	60	126	108	73	120	------	22	11	9
SOCIAL PSYCHOLOGY	1,004	317	205	108	170	115	427	------	43	28	19
PSYCHOLOGY, OTHER	199	43	15	28	32	18	44	------	28	36	16
STATISTICS	2,843	854	170	552	694	346	484	374	289	66	82
GENERAL ECONOMIC THEORY	1,241	236	91	143	179	92	614	32	81	60	39
ECONOMIC HISTORY, HISTORY OF THOUGHT	265	24	14	10	23	4	180	1	11	20	6
ECONOMIC SYSTEMS, DEVELOPMENT AND PLANNING	864	198	79	118	223	135	248	40	92	30	33
ECONOMIC STATISTICS	483	153	58	94	81	43	156	22	30	19	22
MONETARY AND FISCAL THEORY AND INSTITUTIONS	978	157	57	100	186	77	449	15	73	57	41
INTERNATIONAL ECONOMICS	532	77	24	53	121	59	201	12	75	30	16
BUSINESS FINANCE AND ADMINISTRATION, MARKETING AND ACCOUNTING	4,742	279	48	195	1,980	514	799	981	419	158	126
INDUSTRIAL ORGANIZATIONS, GOVERNMENT AND BUSINESS, INDUSTRY STUDIES	804	142	33	104	231	100	232	57	99	26	17
LAND ECONOMICS	1,254	504	119	385	268	147	231	29	115	48	59
LABOR ECONOMICS	662	94	40	54	157	74	282	12	57	39	21
POPULATION, WELFARE PROGRAMS, STANDARDS OF LIVING	164	39	14	24	44	23	45	6	15	7	8
ECONOMICS, OTHER	154	24	7	16	41	20	32	8	24	16	9
APPLIED SOCIOLOGY	63	14	3	11	23	11	19	------	3	3	1
GENERAL SOCIOLOGY	265	22	17	5	16	9	201	------	6	13	7
METHODOLOGY	268	91	48	41	60	48	93	3	11	6	4
POPULATION	173	52	31	21	43	24	50	5	8	9	6
RURAL-URBAN SOCIOLOGY	340	86	43	42	55	29	164	------	12	13	10
SOCIAL CHANGE AND DEVELOPMENT	178	47	31	15	38	25	68	1	9	8	7
SOCIAL ORGANIZATION, STRUCTURE, AND INSTITUTIONS	1,064	222	165	57	147	70	613	------	32	29	21
SOCIAL PROBLEMS, SOCIAL DISORGANIZATION	314	51	35	16	56	31	177	------	10	11	9
SOCIOLOGY, OTHER	38	8	7	1	2	------	21	------	1	5	1
APPLICATION TO LANGUAGE TEACHING	392	30	5	24	78	25	201	1	35	30	17
DESCRIPTIVE LINGUISTICS	407	87	62	25	33	13	187	1	28	47	24
GENERAL LINGUISTICS	81	24	17	6	7	2	36	2	2	7	3
HISTORICAL AND COMPARATIVE LINGUISTICS	210	16	15	1	16	6	149	------	5	16	8
LANGUAGE IN RELATION TO OTHER FIELDS	158	25	15	10	20	8	91	------	5	15	2
LANGUAGE POLICIES	3	1	1	------	------	------	------	------	2	------	------
LITERACY AND WRITING SYSTEMS	16	5	2	3	4	1	4	------	2	------	1
MECHANIZED APPLICATIONS	27	14	5	7	4	4	3	------	------	4	2
PHONETICS	28	10	9	1	5	4	9	------	------	3	1
LINGUISTICS, OTHER	29	2	1	------	4	1	15	------	2	4	2
OTHER SPECIALTIES	6,158	416	131	161	1,095	384	3,000	139	1,037	327	144
ENGINEERING	14,612	4,432	386	1,430	4,609	2,483	851	2,432	1,296	652	340

(A) INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B) INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

SOURCE – NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-40.—NUMBER OF SCIENTISTS, BY SUBFIELD AND YEARS OF PROFESSIONAL EXPERIENCE, 1964

SCIENTIFIC AND TECHNICAL SUBFIELD	TOTAL	YEARS OF PROFESSIONAL EXPERIENCE						NO REPORT OF YEARS OF EXPERIENCE
		1 YEAR	2-4 YEARS	5-9 YEARS	10-14 YEARS	15-19 YEARS	20 OR MORE YEARS	
ALL SUBFIELDS	223,854	8,303	34,864	45,249	42,706	26,304	53,778	12,650
ANALYTICAL CHEMISTRY	8,878	503	1,383	1,675	1,776	982	2,032	527
INORGANIC CHEMISTRY	5,192	278	708	827	893	509	1,561	416
ORGANIC CHEMISTRY	24,162	1,194	3,214	3,817	4,165	2,619	7,248	1,905
RELATED CHEMICAL SPECIALTIES	6,578	378	1,019	1,173	1,167	801	1,706	334
AGRICULTURAL AND FOOD CHEMISTRY	3,228	78	327	425	523	421	1,306	148
BIOCHEMISTRY	6,340	340	1,095	1,217	1,211	709	1,257	511
PHYSICAL CHEMISTRY	7,940	495	1,418	1,573	1,380	729	1,611	734
CHEMISTRY, OTHER	735	25	78	105	103	92	287	45
GEOCHEMISTRY	407	48	97	84	55	37	43	43
GEODESY	130	4	16	21	26	19	37	7
GEOLOGY	10,969	416	1,171	2,203	2,789	1,531	2,223	636
PALEONTOLOGY	906	83	175	168	145	61	154	120
SOLID-EARTH GEOPHYSICS	1,970	52	188	327	448	348	519	88
GEOGRAPHY	1,451	120	281	259	239	150	249	153
HYDROLOGY	795	10	58	117	167	112	289	42
OCEANOGRAPHY	615	39	117	129	126	70	99	35
ATMOSPHERIC, LITHOSPHERIC, AND HYDROSPHERIC SPECIALTIES, OTHER	664	9	54	91	98	75	187	150
ATMOSPHERIC DYNAMICS, CHEMISTRY AND PHYSICS	777	38	153	176	152	70	148	40
CLIMATOLOGY	244	4	22	40	46	37	86	9
SYNOPTIC METEOROLOGY	3,080	84	405	493	553	594	841	110
AREA SPECIALIZATIONS	1,230	17	108	195	230	265	378	37
METEOROLOGICAL INSTRUMENTATION	178	6	20	37	38	22	53	2
METEOROLOGY, OTHER	1	------	------	------	------	------	------	1
ACOUSTICS	1,381	28	211	294	275	156	380	37
ATOMIC AND MOLECULAR PHYSICS	1,772	134	548	426	228	99	189	148
ELECTROMAGNETISM	1,666	47	323	393	326	173	356	48
ELEMENTARY PARTICLES	1,349	122	466	306	163	67	94	131
MECHANICS	943	37	205	202	160	109	207	23
NUCLEAR PHYSICS	3,170	167	785	767	598	294	392	167
OPTICS	2,371	60	487	486	449	264	573	52
PHYSICS OF FLUIDS	1,781	72	409	425	367	194	241	73
SOLID STATE PHYSICS	4,151	199	1,086	1,054	809	345	434	224
THERMAL PHYSICS	635	31	181	144	95	52	90	42
OTHER PHYSICS SPECIALTIES	3,682	191	1,011	755	529	308	715	173
ASTRONOMY	889	61	237	202	132	55	154	48
ELECTRONICS	1,721	34	297	411	352	189	400	38
PHYSICS, OTHER	1,187	82	261	178	151	77	259	179
ALGEBRA	1,633	29	414	421	264	131	313	61
ANALYSIS AND FUNCTIONAL ANALYSIS	2,785	67	657	688	442	228	592	111
GEOMETRY	798	11	117	184	111	78	270	27
LOGIC	381	7	73	118	71	40	53	19
MATHEMATICS OF RESOURCE USE	4,237	31	553	1,097	1,047	583	836	90
NUMBER THEORY	330	9	65	81	57	32	67	19
NUMERICAL METHODS AND COMPUTATIONS	5,729	55	1,017	2,347	1,371	438	356	145
TOPOLOGY	637	18	216	169	96	45	52	41
PROBABILITY	433	13	93	125	87	43	49	23
MATHEMATICS, OTHER	448	6	57	98	84	52	141	10
AGRONOMY	1,168	32	129	221	252	168	320	46
ANIMAL HUSBANDRY	680	14	92	133	137	92	186	26
FISH AND WILDLIFE	1,407	31	285	308	310	198	238	37
FORESTRY	4,008	61	683	903	794	515	939	113
HORTICULTURE	872	22	102	152	161	139	263	33
SOIL SPECIALTIES	1,391	29	160	291	269	197	391	54
ANATOMY	1,006	14	116	163	203	111	358	41
BOTANY	2,244	97	423	520	350	187	549	118
ECOLOGY	1,147	50	286	281	185	111	193	41
ENTOMOLOGY	2,110	31	286	400	403	252	653	85
GENETICS	1,309	58	304	260	250	142	222	73
IMMUNOLOGY	732	11	116	173	159	78	169	26
MICROBIOLOGY	2,793	70	350	506	584	349	802	132
NUTRITION	1,196	38	143	230	225	117	380	63
PATHOLOGY	1,067	13	83	169	198	163	389	52
PHARMACOLOGY	1,345	14	148	279	310	173	362	59
PHYSIOLOGY	3,014	60	377	656	649	397	738	137
PHYTOPATHOLOGY	1,096	43	194	240	199	114	243	63
VIROLOGY	556	9	60	126	152	50	141	18
ZOOLOGY	2,785	89	607	651	442	268	600	128
OTHER BIO-MEDICAL SPECIALTIES	3,047	73	254	480	512	461	1,119	148
BIOPHYSICS	835	29	148	169	162	114	156	57
BIOLOGY, OTHER	853	9	112	165	145	96	270	56

TABLE A-40.—NUMBER OF SCIENTISTS, BY SUBFIELD AND YEARS OF PROFESSIONAL EXPERIENCE, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL SUBFIELD	TOTAL	YEARS OF PROFESSIONAL EXPERIENCE						NO REPORT OF YEARS OF EXPERIENCE
		1 YEAR	2-4 YEARS	5-9 YEARS	10-14 YEARS	15-19 YEARS	20 OR MORE YEARS	
CLINICAL PSYCHOLOGY	6,151	88	875	1,447	1,591	770	1,041	339
COUNSELING AND GUIDANCE	1,831	16	186	325	397	282	521	104
DEVELOPMENTAL PSYCHOLOGY	510	10	82	98	107	61	130	22
EDUCATIONAL PSYCHOLOGY	1,427	14	108	286	288	217	443	71
ENGINEERING PSYCHOLOGY	377	5	48	95	118	56	35	20
GENERAL PSYCHOLOGY	141	2	15	21	18	22	53	10
INDUSTRIAL AND PERSONNEL PSYCHOLOGY	1,367	18	107	215	358	232	338	99
PERSONALITY	479	21	72	105	115	55	73	38
SCHOOL PSYCHOLOGY	939	9	130	281	221	99	159	40
EXPERIMENTAL, COMPARATIVE, AND PHYSIOLOGICAL PSYCHOLOGY	1,912	106	470	469	371	149	229	118
PSYCHOMETRICS	467	9	72	102	104	66	92	22
SOCIAL PSYCHOLOGY	1,004	36	167	247	228	127	164	35
PSYCHOLOGY, OTHER	199	3	15	29	36	26	43	47
STATISTICS	2,843	22	422	668	620	411	609	91
GENERAL ECONOMIC THEORY	1,241	55	190	229	212	180	296	79
ECONOMIC HISTORY, HISTORY OF THOUGHT	265	6	39	38	43	32	85	22
ECONOMIC SYSTEMS, DEVELOPMENT AND PLANNING	864	34	122	163	157	118	217	53
ECONOMIC STATISTICS	483	31	98	91	69	50	107	37
MONETARY AND FISCAL THEORY AND INSTITUTIONS	978	34	163	157	145	127	275	77
INTERNATIONAL ECONOMICS	532	22	55	96	88	57	171	43
BUSINESS FINANCE AND ADMINISTRATION, MARKETING AND ACCOUNTING	4,742	97	415	766	855	751	1,585	273
INDUSTRIAL ORGANIZATIONS, GOVERNMENT AND BUSINESS, INDUSTRY STUDIES	804	20	89	108	143	106	290	48
LAND ECONOMICS	1,254	50	183	215	215	176	328	87
LABOR ECONOMICS	662	16	69	84	101	96	241	55
POPULATION, WELFARE PROGRAMS, STANDARDS OF LIVING	164	3	14	23	25	20	69	10
ECONOMICS, OTHER	154	4	9	23	25	16	56	21
APPLIED SOCIOLOGY	63	------	1	11	17	6	23	5
GENERAL SOCIOLOGY	265	3	16	49	60	46	78	13
METHODOLOGY	268	2	29	85	62	34	49	7
POPULATION	173	------	19	34	29	25	61	5
RURAL-URBAN SOCIOLOGY	340	6	23	74	76	44	105	12
SOCIAL CHANGE AND DEVELOPMENT	178	3	19	33	29	25	61	8
SOCIAL ORGANIZATION, STRUCTURE, AND INSTITUTIONS	1,064	19	121	236	241	165	250	32
SOCIAL PROBLEMS, SOCIAL DISORGANIZATION	314	2	26	76	59	46	97	8
SOCIOLOGY, OTHER	38	------	1	10	6	3	15	3
APPLICATION TO LANGUAGE TEACHING	392	7	56	108	85	56	74	6
DESCRIPTIVE LINGUISTICS	407	17	76	91	75	31	72	45
GENERAL LINGUISTICS	81	6	15	16	13	3	19	9
HISTORICAL AND COMPARATIVE LINGUISTICS	210	5	21	49	40	22	59	14
LANGUAGE IN RELATION TO OTHER FIELDS	158	6	22	29	20	21	46	14
LANGUAGE POLICIES	3	------	------	------	1	------	1	1
LITERACY AND WRITING SYSTEMS	16	------	3	4	3	2	2	2
MECHANIZED APPLICATIONS	27	1	7	8	7	2	------	2
PHONETICS	28	2	7	4	7	------	7	1
LINGUISTICS, OTHER	29	1	3	7	6	3	5	4
OTHER SPECIALTIES	6,158	147	944	1,378	1,077	721	1,653	238
ENGINEERING	14,612	716	1,906	2,567	2,498	1,950	4,243	732

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-41.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD, HIGHEST DEGREE, AND PROGRAM, 1964

SCIENTIFIC AND TECHNICAL FIELD AND HIGHEST DEGREE	TOTAL	NUMBER RECEIVING SUPPORT	GOVERNMENTAL PROGRAMS				
			AGRICULTURE	ATOMIC ENERGY	DEFENSE	EDUCATION	HEALTH
ALL FIELDS	223,854	97,004(1)	10,957	11,267	29,399	8,679	20,736
PH.D.	79,372	39,613	5,501	5,093	8,954	4,400	12,204
PROFESSIONAL MEDICAL	5,925	4,235	77	130	271	246	3,641
MASTER'S	61,222	23,752	2,618	2,694	8,360	2,611	2,470
BACHELOR'S	72,364	27,116	2,610	3,239	10,600	1,353	2,298
LESS THAN BACHELOR'S	7,878	1,549	92	67	871	26	52
NO REPORT	2,093	739	59	44	343	43	71
CHEMISTRY	63,053	19,305	1,582	3,361	5,667	1,280	6,029
PH.D.	21,789	8,870	819	1,477	2,162	794	3,668
PROFESSIONAL MEDICAL	368	292	1	12	11	15	267
MASTER'S	12,229	3,375	317	616	1,040	212	762
BACHELOR'S	27,377	6,566	423	1,230	2,369	252	1,300
LESS THAN BACHELOR'S	590	90	6	14	46	3	9
NO REPORT	700	112	16	12	39	4	23
EARTH SCIENCES	17,907	4,808	226	371	1,232	340	152
PH.D.	3,578	1,438	51	127	309	149	58
PROFESSIONAL MEDICAL	1	------	------	------	------	------	------
MASTER'S	5,829	1,499	79	110	418	110	36
BACHELOR'S	8,101	1,791	91	131	477	76	55
LESS THAN BACHELOR'S	254	56	3	2	21	1	2
NO REPORT	144	34	2	1	7	4	1
METEOROLOGY	5,510	4,814	327	223	2,428	136	203
PH.D.	479	407	31	37	161	22	32
PROFESSIONAL MEDICAL	------	------	------	------	------	------	------
MASTER'S	1,137	995	60	78	514	38	62
BACHELOR'S	2,524	2,229	171	78	1,060	60	90
LESS THAN BACHELOR'S	1,147	991	54	22	582	13	16
NO REPORT	223	192	11	8	111	3	3
PHYSICS	26,698	16,718	60	4,371	8,100	1,055	422
PH.D.	10,286	7,071	24	2,343	3,064	485	213
PROFESSIONAL MEDICAL	30	21	------	1	9	1	6
MASTER'S	8,352	4,704	12	1,081	2,346	326	94
BACHELOR'S	7,673	4,726	22	924	2,553	238	102
LESS THAN BACHELOR'S	185	118	1	13	81	2	5
NO REPORT	172	78	1	9	47	3	2
MATHEMATICS	17,411	7,818	63	554	4,397	898	358
PH.D.	4,603	2,176	24	151	928	386	154
PROFESSIONAL MEDICAL	5	3	------	------	------	------	3
MASTER'S	7,464	3,016	19	218	1,748	395	110
BACHELOR'S	4,917	2,429	17	179	1,590	107	83
LESS THAN BACHELOR'S	210	105	2	5	69	3	5
NO REPORT	212	89	1	1	62	7	3
AGRICULTURAL SCIENCES	9,526	6,406	3,701	93	147	157	137
PH.D.	2,367	1,645	1,384	61	33	50	77
PROFESSIONAL MEDICAL	11	2	1	------	------	------	1
MASTER'S	2,676	1,709	965	17	38	47	38
BACHELOR'S	4,362	2,989	1,326	14	72	59	20
LESS THAN BACHELOR'S	63	31	10	1	2	1	1
NO REPORT	47	30	15	------	2	------	------
BIOLOGICAL SCIENCES	27,135	16,123	3,247	957	1,122	1,371	9,116
PH.D.	13,355	8,744	2,215	597	552	602	4,856
PROFESSIONAL MEDICAL	5,408	3,859	74	115	243	222	3,318
MASTER'S	5,028	2,093	573	135	184	335	555
BACHELOR'S	3,172	1,357	370	106	132	208	352
LESS THAN BACHELOR'S	71	24	10	1	4	1	6
NO REPORT	101	46	5	3	7	3	29
PSYCHOLOGY	16,804	6,397	44	56	1,178	1,666	2,899
PH.D.	10,843	4,664	32	40	752	1,127	2,383
PROFESSIONAL MEDICAL	52	28	------	------	2	2	24
MASTER'S	5,464	1,553	6	15	386	504	442
BACHELOR'S	417	142	5	1	34	30	50
LESS THAN BACHELOR'S	4	3	------	------	3	------	------
NO REPORT	24	7	1	------	1	3	------
STATISTICS	2,843	1,484	95	81	578	.88	276
PH.D.	804	431	28	22	172	50	107
PROFESSIONAL MEDICAL	3	3	------	------	------	1	3
MASTER'S	1,133	573	45	34	241	26	95
BACHELOR'S	810	433	20	24	150	7	62
LESS THAN BACHELOR'S	43	23	2	1	9	------	3
NO REPORT	50	21	------	------	6	4	6

TABLE A-41.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD, HIGHEST DEGREE, AND PROGRAM, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND HIGHEST DEGREE	GOVERNMENTAL PROGRAMS					NO SUPPORT	SUPPORT STATUS UNKNOWN	NO REPORT
	INTERNATIONAL	NATURAL RESOURCES	PUBLIC WORKS	SPACE	OTHER			
ALL FIELDS	1,835	6,822	1,298	13,625	13,144	104,853	6,134	15,863
PH.D.	890	1,610	231	4,309	5,538	34,188	1,312	4,259
PROFESSIONAL MEDICAL	44	4	2	94	248	1,397	67	226
MASTER'S	439	1,859	320	3,914	3,164	30,065	2,039	5,366
BACHELOR'S	401	3,216	683	4,984	3,642	37,027	2,561	5,660
LESS THAN BACHELOR'S	36	87	50	190	399	1,080	71	178
NO REPORT	25	46	12	134	153	1,096	84	174
CHEMISTRY	129	740	132	2,772	1,815	36,903	2,303	4,542
PH.D.	62	244	23	1,015	764	11,496	353	1,070
PROFESSIONAL MEDICAL	2	1	1	6	15	51	4	21
MASTER'S	19	168	15	559	315	7,365	454	1,035
BACHELOR'S	45	315	88	1,149	705	17,069	1,413	2,329
LESS THAN BACHELOR'S	1	4	4	21	4	419	40	41
NO REPORT	------	8	1	22	12	503	39	46
EARTH SCIENCES	191	1,624	336	319	1,064	11,238	314	1,547
PH.D.	69	431	40	111	432	1,850	37	253
PROFESSIONAL MEDICAL	------	------	------	------	------	1	------	------
MASTER'S	45	482	92	97	284	3,741	96	503
BACHELOR'S	71	682	193	103	321	5,392	173	745
LESS THAN BACHELOR'S	4	20	8	4	13	161	5	32
NO REPORT	2	9	3	4	14	93	3	14
METEOROLOGY	143	214	105	656	1,585	440	45	211
PH.D.	14	26	5	159	88	47	4	21
PROFESSIONAL MEDICAL	------	------	------	------	------	------	------	------
MASTER'S	38	50	21	196	251	85	7	50
BACHELOR'S	64	104	52	225	844	192	25	78
LESS THAN BACHELOR'S	23	31	25	56	333	94	9	53
NO REPORT	4	3	2	20	69	22	------	9
PHYSICS	113	112	44	4,607	1,762	6,838	648	2,494
PH.D.	55	28	14	1,743	879	2,495	145	575
PROFESSIONAL MEDICAL	------	------	------	5	3	9	------	------
MASTER'S	26	37	12	1,310	439	2,420	239	989
BACHELOR'S	31	45	17	1,473	426	1,792	248	907
LESS THAN BACHELOR'S	1	1	1	46	5	57	4	6
NO REPORT	------	1	------	30	10	65	12	17
MATHEMATICS	71	76	68	1,933	1,108	7,874	535	1,164
PH.D.	18	14	16	328	577	1,921	152	354
PROFESSIONAL MEDICAL	------	------	------	------	------	2	------	------
MASTER'S	29	24	24	751	331	3,611	261	576
BACHELOR'S	21	36	25	796	184	2,152	104	232
LESS THAN BACHELOR'S	------	1	2	31	11	89	10	6
NO REPORT	3	1	1	27	5	99	8	16
AGRICULTURAL SCIENCES	76	2,500	155	11	476	2,642	157	321
PH.D.	37	222	15	5	64	608	29	85
PROFESSIONAL MEDICAL	------	------	------	------	------	8	------	1
MASTER'S	19	636	30	1	148	787	72	108
BACHELOR'S	19	1,614	110	4	256	1,199	56	118
LESS THAN BACHELOR'S	------	13	------	1	5	28	------	4
NO REPORT	1	15	------	------	3	12	------	5
BIOLOGICAL SCIENCES	195	751	31	450	1,619	8,756	529	1,727
PH.D.	117	386	14	275	940	3,839	128	644
PROFESSIONAL MEDICAL	40	3	1	80	226	1,287	63	199
MASTER'S	20	205	5	61	283	2,211	187	537
BACHELOR'S	17	154	10	32	162	1,337	143	335
LESS THAN BACHELOR'S	------	1	------	1	3	44	1	2
NO REPORT	1	2	1	1	5	38	7	10
PSYCHOLOGY	126	19	21	323	1,161	8,622	661	1,124
PH.D.	107	10	13	209	826	5,353	268	558
PROFESSIONAL MEDICAL	------	------	------	1	2	21	------	3
MASTER'S	18	4	8	100	305	3,026	377	508
BACHELOR'S	1	5	------	12	25	214	15	46
LESS THAN BACHELOR'S	------	------	------	------	------	1	------	------
NO REPORT	------	------	------	1	3	7	1	9
STATISTICS	37	36	23	229	376	1,152	70	137
PH.D.	4	9	1	62	94	312	27	34
PROFESSIONAL MEDICAL	1	------	------	------	------	------	------	------
MASTER'S	13	13	10	96	126	468	27	65
BACHELOR'S	17	12	12	69	139	335	13	29
LESS THAN BACHELOR'S	------	------	------	1	11	17	------	3
NO REPORT	2	2	------	1	6	20	3	6

TABLE A-41.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD, HIGHEST DEGREE, AND PROGRAM, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND HIGHEST DEGREE	TOTAL	NUMBER RECEIVING SUPPORT	GOVERNMENTAL PROGRAMS				
			AGRICULTURE	ATOMIC ENERGY	DEFENSE	EDUCATION	HEALTH
ECONOMICS	12,143	3,589	1,275	115	557	255	141
PH.D.	5,091	1,685	722	26	166	145	66
PROFESSIONAL MEDICAL	2	2	1	------	------	------	1
MASTER'S	4,204	1,295	470	43	207	87	45
BACHELOR'S	2,613	562	78	42	174	21	28
LESS THAN BACHELOR'S	90	15	------	3	6	------	------
NO REPORT	143	30	4	1	4	2	1
SOCIOLOGY	2,703	985	114	3	65	226	447
PH.D.	2,179	806	101	2	47	197	375
PROFESSIONAL MEDICAL	9	8	------	------	------	2	7
MASTER'S	434	144	10	1	11	25	58
BACHELOR'S	65	23	3	------	5	1	6
LESS THAN BACHELOR'S	3	------	------	------	------	------	------
NO REPORT	13	4	------	------	2	1	1
LINGUISTICS	1,351	403	3	4	92	194	39
PH.D.	729	239	------	------	45	132	26
PROFESSIONAL MEDICAL	2	1	------	------	------	------	------
MASTER'S	407	102	1	2	27	37	9
BACHELOR'S	162	48	2	2	16	20	4
LESS THAN BACHELOR'S	1	1	------	------	------	------	------
NO REPORT	50	12	------	------	4	5	------
OTHER FIELDS	20,770	8,154	220	1,078	3,836	1,013	517
PH.D.	3,269	1,437	70	210	563	261	189
PROFESSIONAL MEDICAL	34	16	------	2	6	3	11
MASTER'S	6,865	2,704	61	344	1,200	469	164
BACHELOR'S	10,171	3,821	82	508	1,968	274	146
LESS THAN BACHELOR'S	217	92	4	5	48	2	5
NO REPORT	214	84	3	9	51	4	2

TABLE A-41.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD, HIGHEST DEGREE, AND PROGRAM, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND HIGHEST DEGREE	GOVERNMENTAL PROGRAMS					NO SUPPORT	SUPPORT STATUS UNKNOWN	NO REPORT
	INTERNATIONAL	NATURAL RESOURCES	PUBLIC WORKS	SPACE	OTHER			
ECONOMICS	477	333	122	234	991	7,536	198	820
PH.D.	268	150	47	65	434	3,023	65	318
PROFESSIONAL MEDICAL	------	------	------	------	------	-------	------	------
MASTER'S	149	129	41	86	362	2,474	90	345
BACHELOR'S	49	49	33	77	182	1,880	39	132
LESS THAN BACHELOR'S	5	2	------	3	1	65	------	10
NO REPORT	6	3	1	3	12	94	4	15
SOCIOLOGY	68	12	13	16	263	1,512	35	171
PH.D.	60	9	11	10	200	1,213	28	132
PROFESSIONAL MEDICAL	------	------	------	------	2	1	------	------
MASTER'S	7	3	1	5	49	253	4	33
BACHELOR'S	1	------	1	------	9	36	2	4
LESS THAN BACHELOR'S	------	------	------	------	------	2	------	1
NO REPORT	------	------	------	1	3	7	1	1
LINGUISTICS	51	2	2	1	87	719	63	166
PH.D.	24	1	------	------	45	421	29	40
PROFESSIONAL MEDICAL	1	------	------	------	------	1	------	------
MASTER'S	16	1	1	1	27	204	20	81
BACHELOR'S	8	------	------	------	12	63	11	40
LESS THAN BACHELOR'S	------	------	1	------	------	-------	------	------
NO REPORT	2	------	------	------	3	30	3	5
OTHER FIELDS	158	403	246	2,074	837	10,621	576	1,419
PH.D.	55	80	32	327	195	1,610	47	175
PROFESSIONAL MEDICAL	------	------	------	2	------	16	------	2
MASTER'S	40	107	60	651	244	3,420	205	536
BACHELOR'S	57	200	142	1,044	377	5,366	319	665
LESS THAN BACHELOR'S	2	14	9	26	13	103	2	20
NO REPORT	4	2	3	24	8	106	3	21

(1)OF THIS NUMBER, 20,758 SCIENTISTS REPORTED SUPPORT FROM MORE THAN 1 FEDERAL PROGRAM, HENCE THE COLUMNS GIVING NUMBER OF SCIENTISTS BY PROGRAM DO NOT ADD TO TOTAL.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-42.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD, TYPE OF EMPLOYER, AND PROGRAM, 1964

SCIENTIFIC AND TECHNICAL FIELD AND TYPE OF EMPLOYER	TOTAL	NUMBER RECEIVING SUPPORT	GOVERNMENTAL PROGRAMS				
			AGRICULTURE	ATOMIC ENERGY	DEFENSE	EDUCATION	HEALTH
ALL FIELDS	223,854	97,004(1)	10,957	11,267	29,399	8,679	20,736
EDUCATIONAL INSTITUTIONS	77,727	37,915	5,275	5,259	4,896	7,117	12,797
FEDERAL GOVERNMENT	23,405	23,405	4,650	1,001	6,046	520	2,788
OTHER GOVERNMENT	7,472	3,646	512	206	137	301	1,092
MILITARY	5,522	5,522	9	176	3,624	110	590
NONPROFIT ORGANIZATIONS	8,722	5,314	137	723	1,933	342	2,226
INDUSTRY AND BUSINESS	84,421	19,771	256	3,675	12,488	148	796
SELF-EMPLOYED	4,277	620	42	49	145	59	241
OTHER	1,434	593	30	157	90	56	154
NOT EMPLOYED	9,617	------	------	------	------	------	------
NO REPORT	1,257	218	46	21	40	26	52
CHEMISTRY	63,053	19,305	1,582	3,361	5,667	1,280	6,029
EDUCATIONAL INSTITUTIONS	13,616	7,514	589	1,387	717	1,152	3,796
FEDERAL GOVERNMENT	4,004	4,004	746	268	1,223	54	877
OTHER GOVERNMENT	888	463	46	97	31	21	219
MILITARY	648	648	3	33	360	12	------
NONPROFIT ORGANIZATIONS	1,679	1,065	55	202	253	21	726
INDUSTRY AND BUSINESS	37,859	5,334	126	1,265	3,009	12	346
SELF-EMPLOYED	589	62	8	13	28	3	15
OTHER	311	188	9	90	41	3	41
NOT EMPLOYED	3,168	------	------	------	------	------	------
NO REPORT	291	27	------	6	5	2	9
EARTH SCIENCES	17,907	4,808	226	371	1,232	340	152
EDUCATIONAL INSTITUTIONS	4,023	1,361	42	114	304	277	72
FEDERAL GOVERNMENT	2,325	2,325	157	130	469	21	48
OTHER GOVERNMENT	658	267	9	9	15	7	15
MILITARY	241	241	------	3	164	5	5
NONPROFIT ORGANIZATIONS	216	124	2	23	54	16	4
INDUSTRY AND BUSINESS	8,400	423	8	82	216	9	5
SELF-EMPLOYED	821	24	5	5	5	------	2
OTHER	87	35	2	5	4	5	1
NOT EMPLOYED	962	------	------	------	------	------	------
NO REPORT	174	8	1	------	1	------	------
METEOROLOGY	5,510	4,814	327	223	2,428	136	203
EDUCATIONAL INSTITUTIONS	527	387	26	36	106	42	36
FEDERAL GOVERNMENT	1,857	1,857	289	107	433	7	117
OTHER GOVERNMENT	78	45	4	8	6	1	20
MILITARY	2,113	2,113	1	17	,649	19	7
NONPROFIT ORGANIZATIONS	152	134	3	15	68	6	9
INDUSTRY AND BUSINESS	594	260	2	37	160	1	12
SELF-EMPLOYED	18	5	1	------	2	------	1
OTHER	16	10	1	2	4	------	1
NOT EMPLOYED	140	------	------	------	------	------	------
NO REPORT	15	3	------	1	------	------	------
PHYSICS	26,698	16,718	60	4,371	8,100	1,055	422
EDUCATIONAL INSTITUTIONS	11,611	6,877	16	2,599	1,960	942	236
FEDERAL GOVERNMENT	2,913	2,913	26	201	1,657	32	44
OTHER GOVERNMENT	89	43	2	16	4	4	7
MILITARY	473	473	------	60	361	12	13
NONPROFIT ORGANIZATIONS	1,011	863	5	282	437	31	52
INDUSTRY AND BUSINESS	8,954	5,457	11	1,187	3,627	28	63
SELF-EMPLOYED	166	60	------	11	42	5	6
OTHER	25	16	------	10	3	------	1
NOT EMPLOYED	1,350	------	------	------	------	------	------
NO REPORT	160	16	------	5	9	1	------
MATHEMATICS	17,411	7,818	63	554	4,397	898	358
EDUCATIONAL INSTITUTIONS	7,206	2,395	29	204	590	779	168
FEDERAL GOVERNMENT	1,113	1,113	21	34	643	26	63
OTHER GOVERNMENT	211	119	1	13	16	31	24
MILITARY	277	277	------	5	210	8	14
NONPROFIT ORGANIZATIONS	828	712	4	38	578	14	42
INDUSTRY AND BUSINESS	6,935	3,114	7	244	2,322	25	39
SELF-EMPLOYED	115	31	------	2	19	5	5
OTHER	83	37	------	13	12	6	2
NOT EMPLOYED	562	------	------	------	------	------	------
NO REPORT	81	20	1	1	7	4	1
AGRICULTURAL SCIENCES	9,526	6,406	3,701	93	147	157	137
EDUCATIONAL INSTITUTIONS	2,833	1,905	1,623	60	27	109	91
FEDERAL GOVERNMENT	3,295	3,295	1,701	19	70	26	23
OTHER GOVERNMENT	1,440	1,021	304	4	10	13	11
MILITARY	47	47	1	1	29	3	1
NONPROFIT ORGANIZATIONS	99	19	8	1	1	2	5
INDUSTRY AND BUSINESS	1,382	59	24	6	10	------	4
SELF-EMPLOYED	174	24	16	------	------	1	------
OTHER	36	13	7	1	------	3	2
NOT EMPLOYED	160	------	------	------	------	------	------
NO REPORT	60	23	17	1	------	------	------

TABLE A-42.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD, TYPE OF EMPLOYER, AND PROGRAM, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND TYPE OF EMPLOYER	GOVERNMENTAL PROGRAMS					NO SUPPORT	SUPPORT STATUS UNKNOWN	NO REPORT
	INTERNATIONAL	NATURAL RESOURCES	PUBLIC WORKS	SPACE	OTHER			
ALL FIELDS	1,835	6,822	1,298	13,625	13,144	104,853	6,134	15,863
EDUCATIONAL INSTITUTIONS	556	1,138	144	2,374	5,293	33,101	3,142	3,569
FEDERAL GOVERNMENT	676	4,153	570	2,145	4,865	------	------	------
OTHER GOVERNMENT	43	931	260	83	599	3,245	366	215
MILITARY	60	22	21	308	1,012	------	------	------
NONPROFIT ORGANIZATIONS	169	139	43	763	508	2,926	243	239
INDUSTRY AND BUSINESS	242	376	223	7,805	632	61,193	2,231	1,226
SELF-EMPLOYED	19	27	26	75	103	3,418	82	157
OTHER	63	22	11	53	98	741	45	55
NOT EMPLOYED	------	------	------	------	------	------	------	9,617
NO REPORT	7	14	------	19	34	229	25	785
CHEMISTRY	129	740	132	2,772	1,815	36,903	2,303	4,542
EDUCATIONAL INSTITUTIONS	30	139	17	349	800	4,726	797	579
FEDERAL GOVERNMENT	38	397	35	296	615	------	------	------
OTHER GOVERNMENT	6	23	39	19	30	349	54	22
MILITARY	3	2	3	40	143	------	------	------
NONPROFIT ORGANIZATIONS	11	30	3	125	44	505	64	45
INDUSTRY AND BUSINESS	34	135	30	1,911	159	30,693	1,361	471
SELF-EMPLOYED	1	8	3	12	6	489	12	26
OTHER	5	5	2	20	12	109	9	5
NOT EMPLOYED	------	------	------	------	------	------	------	3,168
NO REPORT	1	1	------	------	6	32	6	226
EARTH SCIENCES	191	1,624	336	319	1,064	11,238	314	1,547
EDUCATIONAL INSTITUTIONS	47	207	23	107	457	2,264	170	228
FEDERAL GOVERNMENT	87	1,223	172	87	385	------	------	------
OTHER GOVERNMENT	9	96	80	7	67	345	24	22
MILITARY	4	4	4	6	60	------	------	------
NONPROFIT ORGANIZATIONS	11	19	4	16	33	76	4	12
INDUSTRY AND BUSINESS	25	62	45	88	42	7,722	105	150
SELF-EMPLOYED	1	5	5	2	3	766	2	29
OTHER	7	7	3	5	13	41	6	5
NOT EMPLOYED	------	------	------	------	------	------	------	962
NO REPORT	------	1	------	1	4	24	3	139
METEOROLOGY	143	214	105	656	1,585	440	45	211
EDUCATIONAL INSTRUCTIONS	7	26	1	118	84	86	21	33
FEDERAL GOVERNMENT	98	154	98	281	1,007	------	------	------
OTHER GOVERNMENT	------	6	------	2	6	22	9	2
MILITARY	27	6	3	71	427	------	------	------
NONPROFIT ORGANIZATIONS	6	12	------	53	34	5	2	11
INDUSTRY AND BUSINESS	4	9	3	126	25	309	12	13
SELF-EMPLOYED	------	1	------	3	------	12	------	1
OTHER	------	------	------	1	2	5	1	------
NOT EMPLOYED	------	------	------	------	------	------	------	140
NO REPORT	1	------	------	1	------	1	------	11
PHYSICS	113	112	44	4,607	1,762	6,838	648	2,494
EDUCATIONAL INSTITUTIONS	24	31	9	1,077	1,073	3,417	446	871
FEDERAL GOVERNMENT	45	49	12	803	467	------	------	------
OTHER GOVERNMENT	4	------	1	6	3	36	6	4
MILITARY	2	1	2	65	42	------	------	------
NONPROFIT ORGANIZATIONS	10	7	4	261	73	97	15	36
INDUSTRY AND BUSINESS	28	24	15	2,368	95	3,187	173	137
SELF-EMPLOYED	------	------	1	19	5	90	7	9
OTHER	------	------	------	3	3	6	------	3
NOT EMPLOYED	------	------	------	------	------	------	------	1,350
NO REPORT	------	------	------	5	1	5	1	84
MATHEMATICS	71	76	68	1,933	1,108	7,874	535	1,184
EDUCATIONAL INSTITUTIONS	12	16	12	205	698	3,987	377	447
FEDERAL GOVERNMENT	17	35	11	205	202	------	------	------
OTHER GOVERNMENT	1	4	11	9	22	77	11	4
MILITARY	1	1	------	22	37	------	------	------
NONPROFIT ORGANIZATIONS	9	6	11	138	37	86	9	21
INDUSTRY AND BUSINESS	29	12	19	1,337	97	3,597	132	92
SELF-EMPLOYED	------	1	2	8	2	76	2	6
OTHER	2	1	2	7	5	38	1	7
NOT EMPLOYED	------	------	------	------	------	------	------	562
NO REPORT	------	------	------	2	8	13	3	45
AGRICULTURAL SCIENCES	76	2,500	155	11	476	2,642	157	321
EDUCATIONAL INSTITUTIONS	33	194	12	5	80	752	107	69
FEDERAL GOVERNMENT	31	1,613	102	2	237	------	------	------
OTHER GOVERNMENT	6	653	34	2	137	352	32	35
MILITARY	------	2	------	------	15	------	------	------
NONPROFIT ORGANIZATIONS	2	2	------	------	1	80	------	------
INDUSTRY AND BUSINESS	2	22	7	2	2	1,279	15	29
SELF-EMPLOYED	1	5	------	------	3	145	3	2
OTHER	1	2	------	------	1	22	------	1
NOT EMPLOYED	------	------	------	------	------	------	------	160
NO REPORT	------	7	------	------	------	12	------	25

TABLE A-42.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD, TYPE OF EMPLOYER, AND PROGRAM, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND TYPE OF EMPLOYER	TOTAL	NUMBER RECEIVING SUPPORT	GOVERNMENTAL PROGRAMS				
			AGRICULTURE	ATOMIC ENERGY	DEFENSE	EDUCATION	HEALTH
BIOLOGICAL SCIENCES	27,135	16,123	3,247	957	1,122	1,371	9,116
EDUCATIONAL INSTITUTIONS	15,872	9,902	1,945	600	307	1,180	6,182
FEDERAL GOVERNMENT	2,916	2,916	1,110	82	369	53	804
OTHER GOVERNMENT	1,203	693	112	27	13	31	403
MILITARY	790	790	4	20	242	15	447
NONPROFIT ORGANIZATIONS	1,775	1,053	34	85	50	56	877
INDUSTRY AND BUSINESS	2,720	461	17	125	130	9	186
SELF-EMPLOYED	647	160	6	5	3	7	132
OTHER	202	90	3	10	3	14	59
NOT EMPLOYED	839	------	------	------	------	------	------
NO REPORT	171	58	16	3	5	6	26
PSYCHOLOGY	16,804	6,397	44	56	1,178	1,666	2,899
EDUCATIONAL INSTITUTIONS	8,162	2,997	26	15	306	1,225	1,517
FEDERAL GOVERNMENT	1,378	1,378	6	3	269	89	532
OTHER GOVERNMENT	1,901	456	2	2	13	132	268
MILITARY	230	230	------	1	118	9	53
NONPROFIT ORGANIZATIONS	1,574	656	1	14	140	128	383
INDUSTRY AND BUSINESS	1,362	442	6	18	311	23	31
SELF-EMPLOYED	1,144	147	1	------	10	32	70
OTHER	274	65	2	3	6	19	32
NOT EMPLOYED	658	------	------	------	------	------	------
NO REPORT	121	26	------	------	5	9	13
STATISTICS	2,843	1,484	95	81	578	88	276
EDUCATIONAL INSTITUTIONS	778	328	29	12	104	54	83
FEDERAL GOVERNMENT	568	568	59	4	152	21	106
OTHER GOVERNMENT	122	78	1	2	1	3	22
MILITARY	31	31	------	------	19	2	8
NONPROFIT ORGANIZATIONS	139	88	2	5	48	7	44
INDUSTRY AND BUSINESS	1,055	364	4	53	247	1	8
SELF-EMPLOYED	25	10	------	1	4	------	3
OTHER	38	15	------	4	3	------	1
NOT EMPLOYED	66	------	------	------	------	------	------
NO REPORT	21	2	------	------	------	------	1
ECONOMICS	12,143	3,589	1,275	115	557	255	141
EDUCATIONAL INSTITUTIONS	5,061	1,416	771	15	72	176	53
FEDERAL GOVERNMENT	1,274	1,274	432	20	87	52	39
OTHER GOVERNMENT	284	124	18	1	4	7	3
MILITARY	83	83	------	------	63	3	------
NONPROFIT ORGANIZATIONS	465	185	14	11	95	12	15
INDUSTRY AND BUSINESS	3,967	408	26	66	231	3	27
SELF-EMPLOYED	195	20	2	2	2	1	------
OTHER	207	61	3	------	------	------	4
NOT EMPLOYED	510	------	------	------	------	------	------
NO REPORT	97	18	9	------	3	1	------
SOCIOLOGY	2,703	985	114	3	65	226	447
EDUCATIONAL INSTITUTIONS	2,080	690	96	------	34	186	323
FEDERAL GOVERNMENT	137	137	15	------	10	15	48
OTHER GOVERNMENT	115	56	------	------	------	4	33
MILITARY	10	10	------	------	4	1	5
NONPROFIT ORGANIZATIONS	160	66	1	2	10	17	32
INDUSTRY AND BUSINESS	55	10	1	1	6	1	1
SELF-EMPLOYED	20	6	------	------	1	1	3
OTHER	21	10	1	------	------	1	2
NOT EMPLOYED	97	------	------	------	------	------	------
NO REPORT	8	------	------	------	------	------	------
LINGUISTICS	1,351	403	3	4	92	194	39
EDUCATIONAL INSTITUTIONS	930	256	1	1	37	149	31
FEDERAL GOVERNMENT	72	72	------	------	24	20	2
OTHER GOVERNMENT	25	18	1	------	4	10	1
MILITARY	1	1	------	------	1	------	------
NONPROFIT ORGANIZATIONS	100	21	------	------	7	8	1
INDUSTRY AND BUSINESS	64	30	1	3	18	6	3
SELF-EMPLOYED	4	------	------	------	------	------	------
OTHER	10	2	------	------	------	------	1
NOT EMPLOYED	126	------	------	------	------	------	------
NO REPORT	19	3	------	------	1	1	------
OTHER FIELDS	20,770	8,154	220	1,078	3,836	1,013	517
EDUCATIONAL INSTITUTIONS	5,028	1,887	82	216	332	846	209
FEDERAL GOVERNMENT	1,553	1,553	88	133	640	44	85
OTHER GOVERNMENT	458	263	12	27	20	37	66
MILITARY	578	578	------	36	404	21	37
NONPROFIT ORGANIZATIONS	524	328	8	45	192	24	36
INDUSTRY AND BUSINESS	11,074	3,409	23	588	2,201	30	71
SELF-EMPLOYED	359	71	3	10	29	4	4
OTHER	124	51	2	19	14	5	7
NOT EMPLOYED	979	------	------	------	------	------	------
NO REPORT	93	14	2	4	4	2	2

TABLE A-42.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD, TYPE OF EMPLOYER, AND PROGRAM, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND TYPE OF EMPLOYER	GOVERNMENTAL PROGRAMS					NO SUPPORT	SUPPORT STATUS UNKNOWN	NO REPORT
	INTERNATIONAL	NATURAL RESOURCES	PUBLIC WORKS	SPACE	OTHER			
BIOLOGICAL SCIENCES	195	751	31	450	1,619	8,756	529	1,727
EDUCATIONAL INSTITUTIONS	91	307	7	182	970	4,927	408	635
FEDERAL GOVERNMENT	51	301	11	75	381	------	------	------
OTHER GOVERNMENT	4	106	4	11	52	431	36	43
MILITARY	14	3	2	40	114	------	------	------
NONPROFIT ORGANIZATIONS	17	20	2	27	59	630	45	47
INDUSTRY AND BUSINESS	7	8	4	103	17	2,171	32	56
SELF-EMPLOYED	1	2	1	6	13	459	2	26
OTHER	9	4	------	3	7	96	4	12
NOT EMPLOYED	------	------	------	------	------	------	------	839
NO REPORT	1	------	------	3	6	42	2	69
PSYCHOLOGY	126	19	21	323	1,161	8,622	661	1,124
EDUCATIONAL INSTITUTIONS	48	7	3	62	318	4,571	344	250
FEDERAL GOVERNMENT	23	7	6	43	502	------	------	------
OTHER GOVERNMENT	3	1	4	6	98	1,218	165	62
MILITARY	2	------	1	13	57	------	------	------
NONPROFIT ORGANIZATIONS	22	1	2	25	101	798	81	39
INDUSTRY AND BUSINESS	18	2	4	166	22	886	13	21
SELF-EMPLOYED	6	------	------	4	49	925	34	38
OTHER	4	1	1	2	10	186	16	7
NOT EMPLOYED	------	------	------	------	------	------	------	658
NO REPORT	------	------	------	2	4	38	8	49
STATISTICS	37	36	23	229	376	1,152	70	137
EDUCATIONAL INSTITUTIONS	2	9	2	25	76	376	40	34
FEDERAL GOVERNMENT	26	21	11	20	231	------	------	------
OTHER GOVERNMENT	2	1	4	------	44	40	3	1
MILITARY	------	------	------	------	2	------	------	------
NONPROFIT ORGANIZATIONS	2	4	2	17	5	44	1	6
INDUSTRY AND BUSINESS	1	------	3	162	14	651	26	14
SELF-EMPLOYED	------	------	1	2	1	15	------	------
OTHER	4	------	------	3	2	21	------	2
NOT EMPLOYED	------	------	------	------	------	------	------	66
NO REPORT	------	1	------	------	1	5	------	14
ECONOMICS	477	333	122	234	991	7,536	198	820
EDUCATIONAL INSTITUTIONS	154	120	26	47	266	3,372	129	144
FEDERAL GOVERNMENT	191	157	52	16	514	------	------	------
OTHER GOVERNMENT	5	15	17	3	71	148	5	7
MILITARY	2	------	------	1	17	------	------	------
NONPROFIT ORGANIZATIONS	54	21	6	18	38	268	2	10
INDUSTRY AND BUSINESS	35	17	20	143	43	3,424	56	79
SELF-EMPLOYED	7	------	1	2	10	163	2	10
OTHER	27	------	------	1	30	132	3	11
NOT EMPLOYED	------	------	------	------	------	------	------	510
NO REPORT	2	3	------	3	2	29	1	49
SOCIOLOGY	68	12	13	16	263	1,512	35	171
EDUCATIONAL INSTITUTIONS	48	9	8	11	161	1,299	30	61
FEDERAL GOVERNMENT	13	3	1	1	46	------	------	------
OTHER GOVERNMENT	------	------	2	------	21	54	3	2
MILITARY	------	------	------	------	------	------	------	------
NONPROFIT ORGANIZATIONS	5	------	1	2	25	92	------	2
INDUSTRY AND BUSINESS	------	------	1	2	2	45	------	------
SELF-EMPLOYED	------	------	------	------	3	11	1	2
OTHER	2	------	------	------	5	10	1	------
NOT EMPLOYED	------	------	------	------	------	------	------	97
NO REPORT	------	------	------	------	------	1	------	7
LINGUISTICS	51	2	2	1	87	719	63	166
EDUCATIONAL INSTITUTIONS	28	2	1	1	49	589	57	28
FEDERAL GOVERNMENT	14	------	------	------	21	------	------	------
OTHER GOVERNMENT	1	------	1	------	4	5	------	2
MILITARY	------	------	------	------	------	------	------	------
NONPROFIT ORGANIZATIONS	2	------	------	------	7	74	4	1
INDUSTRY AND BUSINESS	6	------	------	------	4	32	1	1
SELF-EMPLOYED	------	------	------	------	------	4	------	------
OTHER	------	------	------	------	1	8	------	------
NOT EMPLOYED	------	------	------	------	------	------	------	126
NO REPORT	------	------	------	------	1	7	1	8
OTHER FIELDS	158	403	246	2,074	837	10,621	576	1,419
EDUCATIONAL INSTITUTIONS	32	71	23	185	261	2,735	216	190
FEDERAL GOVERNMENT	42	193	59	316	257	------	------	------
OTHER GOVERNMENT	2	26	63	18	44	168	18	9
MILITARY	5	3	6	50	98	------	------	------
NONPROFIT ORGANIZATIONS	18	17	8	81	51	171	16	9
INDUSTRY AND BUSINESS	53	85	72	1,397	110	7,197	305	163
SELF-EMPLOYED	2	5	12	17	8	263	17	8
OTHER	2	2	3	8	7	67	4	2
NOT EMPLOYED	------	------	------	------	------	------	------	979
NO REPORT	2	1	------	2	1	20	------	59

(1)OF THIS NUMBER, 20,758 SCIENTISTS REPORTED SUPPORT FROM MORE THAN 1 FEDERAL PROGRAM, HENCE THE COLUMNS GIVING NUMBER OF SCIENTISTS BY PROGRAM DO NOT ADD TO TOTAL.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-43.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD, WORK ACTIVITY, AND PROGRAM, 1964

SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY	TOTAL	NUMBER RECEIVING SUPPORT	GOVERNMENTAL PROGRAMS				
			AGRICULTURE	ATOMIC ENERGY	DEFENSE	EDUCATION	HEALTH
ALL FIELDS	223,854	97,004(1)	10,957	11,267	29,399	8,679	20,736
RESEARCH AND DEVELOPMENT (A)	77,699	45,703	5,432	6,618	13,709	1,792	11,342
BASIC RESEARCH	35,781	25,041	2,690	4,087	4,864	1,233	8,730
APPLIED RESEARCH	30,280	15,728	2,609	1,723	5,905	502	2,468
MANAGEMENT OR ADMINISTRATION (B)	46,255	21,652	2,728	2,340	8,708	1,482	3,087
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	24,568	12,886	1,335	1,651	6,056	676	1,995
TEACHING	41,209	13,778	1,208	978	1,647	4,512	3,754
PRODUCTION AND INSPECTION	16,582	3,630	341	608	1,613	43	396
OTHER	26,301	9,731	861	530	3,116	657	1,581
NOT EMPLOYED	9,617	------	------	------	------	------	------
NO REPORT	6,191	2,510	387	193	606	193	576
CHEMISTRY	63,053	19,305	1,582	3,361	5,667	1,280	6,029
RESEARCH AND DEVELOPMENT (A)	27,645	11,036	1,006	1,950	2,760	383	4,045
BASIC RESEARCH	12,472	7,452	667	1,172	1,236	362	3,562
APPLIED RESEARCH	10,607	2,806	322	555	1,132	19	446
MANAGEMENT OR ADMINISTRATION (B)	13,125	3,343	290	633	1,616	120	617
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	8,740	2,448	233	430	1,280	57	422
TEACHING	5,798	2,097	99	269	232	679	791
PRODUCTION AND INSPECTION	9,485	1,675	112	365	712	17	272
OTHER	2,242	685	33	88	216	45	165
NOT EMPLOYED	3,168	------	------	------	------	------	------
NO REPORT	1,590	469	42	56	131	36	139
EARTH SCIENCES	17,907	4,808	226	371	1,232	340	152
RESEARCH AND DEVELOPMENT (A)	2,826	1,768	87	169	468	42	52
BASIC RESEARCH	1,696	1,132	43	105	254	38	32
APPLIED RESEARCH	1,112	627	44	64	208	4	20
MANAGEMENT OR ADMINISTRATION (B)	2,614	921	47	85	315	55	34
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	964	499	32	55	177	32	21
TEACHING	2,545	636	15	23	103	198	25
PRODUCTION AND INSPECTION	939	160	10	22	29	5	6
OTHER	7,392	1,152	60	67	273	31	30
NOT EMPLOYED	962	------	------	------	------	------	------
NO REPORT	629	171	7	5	44	9	5
METEOROLOGY	5,510	4,814	327	223	2,428	136	203
RESEARCH AND DEVELOPMENT (A)	1,043	949	51	72	382	16	56
BASIC RESEARCH	519	462	17	29	146	11	23
APPLIED RESEARCH	505	473	34	42	230	5	32
MANAGEMENT OR ADMINISTRATION (B)	1,265	1,186	107	83	680	46	72
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	346	322	14	46	180	8	31
TEACHING	222	149	7	8	53	31	12
PRODUCTION AND INSPECTION	68	51	4	2	21	1	9
OTHER	2,596	2,346	151	49	1,246	39	44
NOT EMPLOYED	140	------	------	------	------	------	------
NO REPORT	176	133	7	9	46	3	10
PHYSICS	26,698	16,718	60	4,371	8,100	1,055	422
RESEARCH AND DEVELOPMENT (A)	14,345	10,772	34	3,071	5,079	248	230
BASIC RESEARCH	8,040	6,048	18	2,120	2,144	209	162
APPLIED RESEARCH	4,244	3,201	14	641	2,040	20	49
MANAGEMENT OR ADMINISTRATION (B)	4,018	3,017	15	685	1,995	107	86
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	3,083	2,467	13	575	1,658	46	55
TEACHING	5,368	2,026	4	432	528	662	74
PRODUCTION AND INSPECTION	221	105	3	30	61	2	4
OTHER	775	510	1	89	311	24	18
NOT EMPLOYED	1,350	------	------	------	------	------	------
NO REPORT	621	288	3	64	126	12	10
MATHEMATICS	17,411	7,818	63	554	4,397	898	358
RESEARCH AND DEVELOPMENT (A)	5,587	3,667	27	321	2,205	130	164
BASIC RESEARCH	1,659	954	6	93	368	90	60
APPLIED RESEARCH	2,149	1,595	18	154	1,051	28	82
MANAGEMENT OR ADMINISTRATION (B)	3,444	1,734	19	138	1,211	116	96
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	1,916	1,209	12	89	879	58	74
TEACHING	5,023	1,215	3	21	215	597	54
PRODUCTION AND INSPECTION	1,080	488	4	28	349	7	15
OTHER	1,340	554	9	39	350	33	21
NOT EMPLOYED	562	------	------	------	------	------	------
NO REPORT	375	160	1	7	67	15	8

TABLE A-43.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD, WORK ACTIVITY, AND PROGRAM, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY	GOVERNMENTAL PROGRAMS					NO SUPPORT	SUPPORT STATUS UNKNOWN	NO REPORT
	INTERNATIONAL	NATURAL RESOURCES	PUBLIC WORKS	SPACE	OTHER			
ALL FIELDS	1,835	6,822	1,298	13,625	13,144	104,853	6,134	15,863
RESEARCH AND DEVELOPMENT (A)	431	2,231	237	7,291	4,807	27,443	2,498	2,055
BASIC RESEARCH	189	1,130	59	2,634	3,319	7,945	1,259	1,536
APPLIED RESEARCH	217	1,011	142	2,930	1,280	13,285	860	407
MANAGEMENT OR ADMINISTRATION (B)	726	2,749	481	3,853	2,527	23,600	399	604
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	412	1,022	173	2,973	1,244	11,202	166	314
TEACHING	255	458	51	603	2,476	24,456	1,479	1,496
PRODUCTION AND INSPECTION	65	230	163	736	363	12,007	751	194
OTHER	296	965	340	870	2,426	15,165	862	543
NOT EMPLOYED	------	------	------	------	------	-------	------	9,617
NO REPORT	62	189	26	272	545	2,182	145	1,354
CHEMISTRY	129	740	132	2,772	1,815	36,903	2,303	4,542
RESEARCH AND DEVELOPMENT (A)	24	383	27	1,461	845	14,950	1,141	518
BASIC RESEARCH	13	209	8	603	679	4,060	589	371
APPLIED RESEARCH	6	155	17	609	140	7,344	346	111
MANAGEMENT OR ADMINISTRATION (B)	62	178	37	741	247	9,501	147	134
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	37	148	20	607	148	6,121	77	94
TEACHING	7	42	------	87	335	3,227	270	204
PRODUCTION AND INSPECTION	17	73	55	342	148	7,153	541	116
OTHER	15	42	9	93	130	1,354	150	53
NOT EMPLOYED	------	------	------	------	------	-------	------	3,168
NO REPORT	4	22	4	48	110	718	54	349
EARTH SCIENCES	191	1,624	336	319	1,064	11,238	314	1,547
RESEARCH AND DEVELOPMENT (A)	36	612	48	162	375	914	59	85
BASIC RESEARCH	20	390	13	126	290	447	48	69
APPLIED RESEARCH	16	220	35	35	85	458	11	16
MANAGEMENT OR ADMINISTRATION (B)	55	354	77	66	134	1,640	16	37
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	33	194	31	40	73	448	3	14
TEACHING	29	92	8	25	212	1,702	89	118
PRODUCTION AND INSPECTION	8	45	43	9	25	750	17	12
OTHER	57	484	155	47	244	5,991	120	129
NOT EMPLOYED	------	------	------	------	------	-------	------	962
NO REPORT	6	37	5	10	74	241	13	204
METEOROLOGY	143	214	105	656	1,585	440	45	211
RESEARCH AND DEVELOPMENT (A)	26	51	5	293	209	45	15	34
BASIC RESEARCH	14	22	2	182	105	20	6	31
APPLIED RESEARCH	12	29	3	102	102	21	9	2
MANAGEMENT OR ADMINISTRATION (B)	63	70	40	185	347	74	1	4
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	17	21	5	109	56	21	------	3
TEACHING	------	7	1	22	41	60	7	6
PRODUCTION AND INSPECTION	3	4	3	4	20	15	2	------
OTHER	49	74	53	130	909	226	17	7
NOT EMPLOYED	------	------	------	------	------	-------	------	140
NO REPORT	2	8	3	22	59	20	3	20
PHYSICS	113	112	44	4,607	1,762	6,838	648	2,494
RESEARCH AND DEVELOPMENT (A)	33	59	18	3,009	1,137	2,636	346	591
BASIC RESEARCH	19	32	8	1,285	946	1,250	227	515
APPLIED RESEARCH	10	22	6	1,136	131	917	77	49
MANAGEMENT OR ADMINISTRATION (B)	52	33	15	1,074	171	924	20	57
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	43	28	10	915	134	567	13	36
TEACHING	16	12	3	244	357	2,866	222	254
PRODUCTION AND INSPECTION	------	1	1	35	5	99	15	2
OTHER	8	4	5	157	40	217	29	19
NOT EMPLOYED	------	------	------	------	------	-------	------	1,350
NO REPORT	4	3	2	88	52	96	16	221
MATHEMATICS	71	76	68	1,933	1,108	7,874	535	1,184
RESEARCH AND DEVELOPMENT (A)	24	27	26	1,041	482	1,486	201	233
BASIC RESEARCH	7	5	3	139	326	409	115	181
APPLIED RESEARCH	13	17	16	517	112	471	41	42
MANAGEMENT OR ADMINISTRATION (B)	26	21	26	515	138	1,633	25	52
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	18	10	19	371	85	670	12	25
TEACHING	5	5	2	59	347	3,379	228	201
PRODUCTION AND INSPECTION	3	10	3	134	34	552	27	13
OTHER	10	8	10	147	67	706	42	38
NOT EMPLOYED	------	------	------	------	------	-------	------	562
NO REPORT	3	5	1	37	40	118	12	85

TABLE A-43.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD, WORK ACTIVITY, AND PROGRAM, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY	TOTAL	NUMBER RECEIVING SUPPORT	GOVERNMENTAL PROGRAMS				
			AGRICULTURE	ATOMIC ENERGY	DEFENSE	EDUCATION	HEALTH
AGRICULTURAL SCIENCES	9,526	6,406	3,701	93	147	157	137
RESEARCH AND DEVELOPMENT (A)	2,729	2,040	1,447	51	28	23	77
BASIC RESEARCH	847	685	457	38	10	7	49
APPLIED RESEARCH	1,812	1,307	973	13	15	15	28
MANAGEMENT OR ADMINISTRATION (B)	4,287	2,940	1,278	32	73	46	36
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	1,136	801	413	25	26	23	21
TEACHING	893	534	415	8	12	61	14
PRODUCTION AND INSPECTION	257	133	90	------	8	------	1
OTHER	835	521	323	2	19	22	5
NOT EMPLOYED	160	------	------	------	------	------	------
NO REPORT	365	238	148	------	7	5	4
BIOLOGICAL SCIENCES	27,135	16,123	3,247	957	1,122	1,371	9,116
RESEARCH AND DEVELOPMENT (A)	10,980	8,505	2,038	568	531	266	5,057
BASIC RESEARCH	7,368	6,121	1,297	467	326	222	3,823
APPLIED RESEARCH	3,531	2,355	738	97	198	42	1,221
MANAGEMENT OR ADMINISTRATION (B)	4,110	2,434	505	172	342	198	1,228
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	2,492	1,611	349	109	256	100	844
TEACHING	7,785	3,541	365	145	101	803	1,946
PRODUCTION AND INSPECTION	348	147	75	13	15	2	36
OTHER	2,087	912	143	33	89	51	510
NOT EMPLOYED	839	------	------	------	------	------	------
NO REPORT	986	584	121	26	44	51	339
PSYCHOLOGY	16,804	6,397	44	56	1,178	1,666	2,899
RESEARCH AND DEVELOPMENT (A)	4,108	2,302	6	26	559	466	1,167
BASIC RESEARCH	1,397	1,106	1	12	170	172	769
APPLIED RESEARCH	2,595	1,105	5	14	326	287	389
MANAGEMENT OR ADMINISTRATION (B)	2,849	1,376	21	18	389	400	486
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	1,079	736	11	10	278	170	269
TEACHING	3,670	1,132	14	7	102	450	542
PRODUCTION AND INSPECTION	11	2	1	------	1	------	------
OTHER	5,148	1,498	2	4	110	321	672
NOT EMPLOYED	658	------	------	------	------	------	------
NO REPORT	360	87	------	1	17	29	32
STATISTICS	2,843	1,484	95	81	578	88	276
RESEARCH AND DEVELOPMENT (A)	854	564	24	24	225	18	134
BASIC RESEARCH	170	116	5	4	44	10	34
APPLIED RESEARCH	552	364	17	14	149	7	80
MANAGEMENT OR ADMINISTRATION (B)	694	389	40	16	146	24	74
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	346	208	21	14	79	15	52
TEACHING	484	162	6	3	52	37	31
PRODUCTION AND INSPECTION	374	183	12	19	85	3	13
OTHER	289	150	11	17	58	4	23
NOT EMPLOYED	66	------	------	------	------	------	------
NO REPORT	82	36	2	2	12	2	1
ECONOMICS	12,143	3,589	1,275	115	557	255	141
RESEARCH AND DEVELOPMENT (A)	1,927	1,157	583	6	107	37	35
BASIC RESEARCH	584	329	137	2	30	16	11
APPLIED RESEARCH	1,296	818	446	4	72	19	23
MANAGEMENT OR ADMINISTRATION (B)	3,534	1,151	298	80	284	92	68
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	1,288	624	182	37	142	47	40
TEACHING	3,469	596	219	3	46	90	18
PRODUCTION AND INSPECTION	1,215	164	24	20	58	4	9
OTHER	1,091	397	102	5	43	24	7
NOT EMPLOYED	510	------	------	------	------	------	------
NO REPORT	397	124	49	1	19	8	4
SOCIOLOGY	2,703	985	114	3	65	226	447
RESEARCH AND DEVELOPMENT (A)	593	377	53	------	25	80	179
BASIC RESEARCH	380	231	22	------	14	52	120
APPLIED RESEARCH	209	143	31	------	9	28	59
MANAGEMENT OR ADMINISTRATION (B)	440	226	26	2	15	54	107
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	247	161	16	2	11	37	82
TEACHING	1,406	316	29	------	15	82	142
PRODUCTION AND INSPECTION	9	6	------	------	2	------	1
OTHER	92	40	3	1	5	7	10
NOT EMPLOYED	97	------	------	------	------	------	------
NO REPORT	66	20	3	------	3	3	8

TABLE A-43.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD, WORK ACTIVITY, AND PROGRAM, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY	GOVERNMENTAL PROGRAMS					NO SUPPORT	SUPPORT STATUS UNKNOWN	NO REPORT
	INTERNATIONAL	NATURAL RESOURCES	PUBLIC WORKS	SPACE	OTHER			
AGRICULTURAL SCIENCES	76	2,500	155	11	476	2,642	157	321
RESEARCH AND DEVELOPMENT (A)	18	493	21	3	112	592	66	31
BASIC RESEARCH	------	163	6	1	46	123	26	13
APPLIED RESEARCH	16	305	10	1	63	450	37	18
MANAGEMENT OR ADMINISTRATION (B)	37	1,618	93	5	261	1,269	32	46
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	26	352	13	3	90	302	13	20
TEACHING	7	82	3	1	25	296	32	31
PRODUCTION AND INSPECTION	------	48	11	------	6	116	4	4
OTHER	11	192	23	1	42	282	16	16
NOT EMPLOYED	------	------	------	------	------	------	------	160
NO REPORT	3	67	4	1	30	87	7	33
BIOLOGICAL SCIENCES	195	751	31	450	1,619	8,756	529	1,727
RESEARCH AND DEVELOPMENT (A)	57	360	4	236	655	1,942	234	299
BASIC RESEARCH	36	245	2	159	532	847	169	231
APPLIED RESEARCH	21	112	1	75	122	1,044	65	67
MANAGEMENT OR ADMINISTRATION (B)	79	185	18	128	243	1,572	25	79
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	43	111	9	106	141	825	10	46
TEACHING	34	138	3	48	518	3,747	191	306
PRODUCTION AND INSPECTION	4	4	2	1	9	185	10	6
OTHER	10	37	3	23	126	1,057	54	64
NOT EMPLOYED	------	------	------	------	------	------	------	839
NO REPORT	11	27	1	14	68	253	15	134
PSYCHOLOGY	126	19	21	323	1,161	8,622	661	1,124
RESEARCH AND DEVELOPMENT (A)	35	6	9	156	288	1,497	204	105
BASIC RESEARCH	16	5	1	53	132	215	24	52
APPLIED RESEARCH	18	1	8	87	151	1,259	179	52
MANAGEMENT OR ADMINISTRATION (B)	53	9	8	113	232	1,387	39	47
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	38	4	4	88	96	322	9	12
TEACHING	17	------	1	23	151	2,337	100	101
PRODUCTION AND INSPECTION	------	------	------	1	------	9	------	------
OTHER	20	4	3	26	479	3,218	309	123
NOT EMPLOYED	------	------	------	------	------	------	------	658
NO REPORT	1	------	------	4	11	174	9	90
STATISTICS	37	36	23	229	376	1,152	70	137
RESEARCH AND DEVELOPMENT (A)	8	14	10	95	128	241	30	19
BASIC RESEARCH	1	5	1	7	32	31	9	14
APPLIED RESEARCH	4	9	9	77	78	165	18	5
MANAGEMENT OR ADMINISTRATION (B)	21	10	5	59	121	287	6	12
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	12	8	4	34	57	131	2	5
TEACHING	1	2	------	11	42	288	21	13
PRODUCTION AND INSPECTION	3	6	6	34	39	182	7	2
OTHER	2	4	2	26	30	127	5	7
NOT EMPLOYED	------	------	------	------	------	------	------	66
NO REPORT	2	------	------	4	16	27	1	18
ECONOMICS	477	333	122	234	991	7,536	198	820
RESEARCH AND DEVELOPMENT (A)	128	113	28	21	298	680	48	42
BASIC RESEARCH	43	24	7	4	107	221	15	19
APPLIED RESEARCH	84	88	21	17	189	426	32	20
MANAGEMENT OR ADMINISTRATION (B)	169	114	58	130	319	2,306	24	53
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	95	64	31	79	195	643	6	15
TEACHING	73	42	10	19	139	2,709	77	87
PRODUCTION AND INSPECTION	20	13	6	37	42	1,016	22	13
OTHER	74	40	18	21	159	642	24	28
NOT EMPLOYED	------	------	------	------	------	------	------	510
NO REPORT	13	11	2	6	34	183	3	87
SOCIOLOGY	68	12	13	16	263	1,512	35	171
RESEARCH AND DEVELOPMENT (A)	19	7	5	5	87	191	6	19
BASIC RESEARCH	16	3	3	3	54	129	5	15
APPLIED RESEARCH	3	4	2	2	31	61	1	4
MANAGEMENT OR ADMINISTRATION (B)	19	4	2	4	67	198	8	8
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	10	2	------	3	53	75	3	8
TEACHING	24	1	5	5	81	1,039	18	33
PRODUCTION AND INSPECTION	------	------	------	1	4	3	------	------
OTHER	4	------	1	1	17	46	2	4
NOT EMPLOYED	------	------	------	------	------	------	------	97
NO REPORT	2	------	------	------	7	35	1	10

TABLE A-43.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD, WORK ACTIVITY, AND PROGRAM, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY	TOTAL	NUMBER RECEIVING SUPPORT	GOVERNMENTAL PROGRAMS				
			AGRICULTURE	ATOMIC ENERGY	DEFENSE	EDUCATION	HEALTH
LINGUISTICS	1,351	403	3	4	92	194	39
RESEARCH AND DEVELOPMENT (A)	214	96	—	1	32	28	18
BASIC RESEARCH	132	52	—	—	19	15	14
APPLIED RESEARCH	77	41	—	—	12	13	4
MANAGEMENT OR ADMINISTRATION (B)	171	98	2	1	24	52	7
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	64	42	1	1	14	24	6
TEACHING	695	168	1	1	23	99	10
PRODUCTION AND INSPECTION	4	1	—	—	—	—	—
OTHER	81	24	—	1	9	9	1
NOT EMPLOYED	126	—	—	—	—	—	—
NO REPORT	60	16	—	—	4	6	3
OTHER FIELDS	20,770	8,154	220	1,078	3,836	1,013	517
RESEARCH AND DEVELOPMENT (A)	4,848	2,470	76	359	1,308	55	128
BASIC RESEARCH	517	353	20	45	103	29	71
APPLIED RESEARCH	1,591	893	47	125	463	15	35
MANAGEMENT OR ADMINISTRATION (B)	5,704	2,837	80	395	1,618	172	176
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	2,867	1,758	38	258	1,076	59	78
TEACHING	3,851	1,206	31	58	165	723	95
PRODUCTION AND INSPECTION	2,571	515	6	109	272	2	30
OTHER	2,333	942	23	135	387	47	75
NOT EMPLOYED	979	—	—	—	—	—	—
NO REPORT	484	184	4	22	86	14	13

TABLE A-43.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD, WORK ACTIVITY, AND PROGRAM, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY	GOVERNMENTAL PROGRAMS					NO SUPPORT	SUPPORT STATUS UNKNOWN	NO REPORT
	INTERNATIONAL	NATURAL RESOURCES	PUBLIC WORKS	SPACE	OTHER			
LINGUISTICS	51	2	2	1	87	719	63	166
RESEARCH AND DEVELOPMENT (A)	5	------	------	------	23	92	14	12
BASIC RESEARCH	1	------	------	------	10	64	6	10
APPLIED RESEARCH	4	------	------	------	12	26	8	2
MANAGEMENT OR ADMINISTRATION (B)	16	------	------	------	22	68	2	3
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	4	------	------	------	7	21	------	1
TEACHING	23	2	1	1	34	477	40	10
PRODUCTION AND INSPECTION	------	------	1	------	------	3	------	------
OTHER	3	------	------	------	5	49	4	4
NOT EMPLOYED	------	------	------	------	------	-------	------	126
NO REPORT	4	------	------	------	3	30	3	11
OTHER FIELDS	158	403	246	2,074	837	10,621	576	1,419
RESEARCH AND DEVELOPMENT (A)	18	106	36	809	168	2,177	134	67
BASIC RESEARCH	3	27	5	72	60	129	20	15
APPLIED RESEARCH	10	49	14	272	64	643	36	19
MANAGEMENT OR ADMINISTRATION (B)	74	153	102	833	225	2,741	54	72
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	36	80	27	618	109	1,056	18	35
TEACHING	19	33	14	58	194	2,329	184	132
PRODUCTION AND INSPECTION	7	26	32	138	31	1,924	106	26
OTHER	33	76	58	198	178	1,250	90	51
NOT EMPLOYED	------	------	------	------	------	-------	------	979
NO REPORT	7	9	4	38	41	200	8	92

(1)OF THIS NUMBER, 20,758 SCIENTISTS REPORTED SUPPORT FROM MORE THAN 1 FEDERAL PROGRAM, HENCE THE COLUMNS GIVING NUMBER OF SCIENTISTS BY PROGRAM DO NOT ADD TO TOTAL.

(A)INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-44.—NUMBER OF SCIENTISTS, FULL-TIME PROFESSIONALLY EMPLOYED, PART-TIME STUDENTS, BY FIELD AND HIGHEST DEGREE, 1964

SCIENTIFIC AND TECHNICAL FIELD	TOTAL	HIGHEST DEGREE				LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
		PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S		
ALL FIELDS	9,551	223	95	4,390	4,556	183	104
CHEMISTRY	2,143	46	9	578	1,440	40	30
EARTH SCIENCES	482	16	------	255	203	7	1
METEOROLOGY	288	3	------	72	131	69	13
PHYSICS	1,838	17	1	767	1,031	15	7
MATHEMATICS	1,174	19	------	648	456	26	25
AGRICULTURAL SCIENCES	169	3	------	103	62	------	1
BIOLOGICAL SCIENCES	732	34	81	333	279	3	2
PSYCHOLOGY	683	42	2	602	36	------	1
STATISTICS	178	4	1	102	62	3	6
ECONOMICS	508	16	------	373	112	3	4
SOCIOLOGY	52	5	------	42	5	------	------
LINGUISTICS	81	6	------	49	23	------	3
OTHER FIELDS	1,223	12	1	466	716	17	11

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-45.—NUMBER OF SCIENTISTS, FULL-TIME PROFESSIONALLY EMPLOYED, PART-TIME STUDENTS, BY FIELD AND TYPE OF EMPLOYER, 1964

SCIENTIFIC AND TECHNICAL FIELD	TOTAL	TYPE OF EMPLOYER								NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
		EDUCATIONAL INSTITUTIONS	FEDERAL GOVERNMENT	OTHER GOVERNMENT	MILITARY	NONPROFIT ORGANIZATIONS	INDUSTRY AND BUSINESS	SELF-EMPLOYED	OTHER		
ALL FIELDS	9,551	3,108	1,293	336	300	470	3,915	51	58	-----	20
CHEMISTRY	2,143	312	202	56	20	83	1,449	6	13	-----	2
EARTH SCIENCES	482	186	92	36	12	14	131	6	3	-----	2
METEOROLOGY	288	29	94	1	128	11	25	------	------	-----	-----
PHYSICS	1,838	510	414	4	41	75	791	1	1	-----	1
MATHEMATICS	1,174	423	91	9	13	59	569	2	4	-----	4
AGRICULTURAL SCIENCES	169	99	41	21	1	------	6	------	1	-----	-----
BIOLOGICAL SCIENCES	732	462	87	36	23	52	55	4	8	-----	5
PSYCHOLOGY	683	306	50	131	16	95	51	20	9	-----	5
STATISTICS	178	44	36	4	2	11	80	------	1	-----	-----
ECONOMICS	508	247	72	19	7	24	123	4	12	-----	-----
SOCIOLOGY	52	36	5	2	------	5	3	------	1	-----	-----
LINGUISTICS	81	55	6	------	1	11	6	1	1	-----	-----
OTHER FIELDS	1,223	399	103	17	36	30	626	7	4	-----	1

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-46.—NUMBER OF SCIENTISTS, FULL-TIME PROFESSIONALLY EMPLOYED, PART-TIME STUDENTS, BY FIELD AND WORK ACTIVITY, 1964

SCIENTIFIC AND TECHNICAL FIELD	TOTAL	WORK ACTIVITY								NOT EMPLOYED	NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER		
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D					
ALL FIELDS	9,551	4,774	1,426	2,231	853	472	1,919	812	1,035	------	158
CHEMISTRY	2,143	1,315	427	573	150	109	135	438	73	------	32
EARTH SCIENCES	482	170	112	57	31	14	104	25	137	------	15
METEOROLOGY	288	95	45	48	29	8	8	2	141	------	13
PHYSICS	1,838	1,287	411	583	130	94	342	20	41	------	18
MATHEMATICS	1,174	521	75	255	108	66	324	107	95	------	19
AGRICULTURAL SCIENCES	169	88	39	49	31	17	28	3	14	------	5
BIOLOGICAL SCIENCES	732	320	195	120	32	13	296	21	48	------	15
PSYCHOLOGY	683	231	28	195	85	27	80	------	279	------	8
STATISTICS	178	79	10	59	26	15	26	25	18	------	4
ECONOMICS	508	143	34	107	67	21	182	44	61	------	11
SOCIOLOGY	52	14	7	7	10	6	21	1	3	------	3
LINGUISTICS	81	19	11	8	10	3	46	------	5	------	1
OTHER FIELDS	1,223	492	32	170	144	79	327	126	120	------	14

(A) INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B) INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-47.-FIRST AND SECOND WORK ACTIVITY OF SCIENTIST EMPLOYED AT UNIVERSITIES AND COLLEGES, BY FIELD, 1964

SCIENTIFIC AND TECHNICAL FIELD AND FIRST WORK ACTIVITY	TOTAL	SECOND WORK ACTIVITY								NOT EMPLOYED	NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER		
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D					
ALL FIELDS	69,762	26,959	18,008	7,773	5,151	2,010	15,644	348	7,798	------	13,862
RESEARCH AND DEVELOPMENT (A)	25,726	5,224	1,449	2,877	1,205	1,077	12,099	193	2,533	------	4,472
BASIC RESEARCH	19,879	3,154	------	2,580	762	693	9,990	59	1,846	------	4,068
APPLIED RESEARCH	5,399	1,793	1,347	122	381	336	2,083	109	655	------	378
MANAGEMENT OR ADMINISTRATION (B)	5,299	1,500	703	680	364	213	2,486	52	485	------	412
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	2,725	1,161	516	551	151	------	1,007	24	190	------	192
TEACHING	33,951	19,266	15,389	3,760	3,411	679	------	71	4,537	------	6,666
PRODUCTION AND INSPECTION	245	125	36	60	28	9	19	14	23	------	36
OTHER	2,640	844	431	396	143	32	1,040	18	220	------	375
NOT EMPLOYED	------	------	------	------	------	------	------	------	------	------	------
NO REPORT	1,901	------	------	------	------	------	------	------	------	------	1,901
CHEMISTRY	13,052	4,618	3,511	960	684	273	3,284	144	1,302	------	3,020
RESEARCH AND DEVELOPMENT (A)	6,520	911	184	615	195	178	2,886	99	818	------	1,611
BASIC RESEARCH	5,906	658	------	587	161	148	2,744	38	751	------	1,554
APPLIED RESEARCH	567	220	171	8	32	28	141	52	65	------	57
MANAGEMENT OR ADMINISTRATION (B)	588	191	125	56	33	20	252	17	41	------	54
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	324	152	97	47	13	------	101	5	28	------	25
TEACHING	5,151	3,312	3,059	241	445	68	------	17	435	------	942
PRODUCTION AND INSPECTION	108	68	24	33	5	4	7	9	2	------	17
OTHER	350	136	119	15	6	3	139	2	6	------	61
NOT EMPLOYED	------	------	------	------	------	------	------	------	------	------	------
NO REPORT	335	------	------	------	------	------	------	------	------	------	335
EARTH SCIENCES	3,730	1,529	1,233	288	232	83	560	20	656	------	733
RESEARCH AND DEVELOPMENT (A)	916	168	37	124	48	41	367	7	199	------	127
BASIC RESEARCH	763	124	------	122	38	33	326	3	155	------	117
APPLIED RESEARCH	150	42	37	------	10	8	40	4	44	------	10
MANAGEMENT OR ADMINISTRATION (B)	207	52	42	10	12	7	99	2	28	------	14
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	101	37	28	9	5	------	35	2	11	------	11
TEACHING	2,224	1,229	1,092	137	167	31	------	6	395	------	427
PRODUCTION AND INSPECTION	10	2	2	------	------	------	1	1	4	------	2
OTHER	270	78	60	17	5	4	93	4	30	------	60
NOT EMPLOYED	------	------	------	------	------	------	------	------	------	------	------
NO REPORT	103	------	------	------	------	------	------	------	------	------	103
METEOROLOGY	497	198	109	80	43	35	100	6	69	------	81
RESEARCH AND DEVELOPMENT (A)	276	74	13	53	25	24	81	5	48	------	43
BASIC RESEARCH	204	58	------	51	21	20	62	1	29	------	33
APPLIED RESEARCH	68	12	11	------	4	4	19	4	19	------	10
MANAGEMENT OR ADMINISTRATION (B)	32	12	11	1	2	2	13	------	3	------	2
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	22	11	10	1	------	------	8	------	2	------	1
TEACHING	137	91	73	18	15	8	------	------	13	------	18
PRODUCTION AND INSPECTION	------	------	------	------	------	------	------	------	------	------	------
OTHER	35	21	12	8	1	1	6	1	5	------	1
NOT EMPLOYED	------	------	------	------	------	------	------	------	------	------	------
NO REPORT	17	------	------	------	------	------	------	------	------	------	17
PHYSICS	10,672	4,022	2,426	908	781	358	2,044	10	587	------	3,228
RESEARCH AND DEVELOPMENT (A)	5,376	1,467	240	637	298	277	1,805	7	224	------	1,575
BASIC RESEARCH	4,606	973	------	549	201	188	1,724	6	187	------	1,515
APPLIED RESEARCH	547	337	171	------	63	62	72	1	26	------	48
MANAGEMENT OR ADMINISTRATION (B)	529	231	103	85	36	19	202	------	20	------	40
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	340	204	87	78	17	------	82	------	14	------	23
TEACHING	4,362	2,273	2,042	180	441	59	------	3	341	------	1,304
PRODUCTION AND INSPECTION	5	3	2	1	1	------	------	------	------	------	1
OTHER	109	48	39	5	5	3	37	------	2	------	17
NOT EMPLOYED	------	------	------	------	------	------	------	------	------	------	------
NO REPORT	291	------	------	------	------	------	------	------	------	------	291
MATHEMATICS	6,296	2,260	1,732	437	512	94	1,261	43	653	------	1,567
RESEARCH AND DEVELOPMENT (A)	1,534	253	73	131	53	41	929	21	101	------	177
BASIC RESEARCH	1,147	111	------	103	17	10	834	2	43	------	140
APPLIED RESEARCH	315	112	70	1	28	24	88	9	48	------	30
MANAGEMENT OR ADMINISTRATION (B)	405	112	48	49	21	12	210	11	21	------	30
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	200	85	35	40	9	------	74	7	13	------	12
TEACHING	3,980	1,833	1,584	234	424	35	------	6	519	------	1,198
PRODUCTION AND INSPECTION	45	20	2	9	7	4	2	3	8	------	5
OTHER	199	42	25	14	7	2	120	2	4	------	24
NOT EMPLOYED	------	------	------	------	------	------	------	------	------	------	------
NO REPORT	133	------	------	------	------	------	------	------	------	------	133

TABLE A-47.—FIRST AND SECOND WORK ACTIVITY OF SCIENTISTS EMPLOYED AT UNIVERSITIES AND COLLEGES, BY FIELD, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND FIRST WORK ACTIVITY	TOTAL	SECOND WORK ACTIVITY								NOT EMPLOYED	NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER		
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D					
AGRICULTURAL SCIENCES	2,769	1,189	516	665	243	128	697	22	214	------	404
RESEARCH AND DEVELOPMENT (A)	1,295	500	310	185	88	80	523	8	99	------	77
BASIC RESEARCH	451	184	------	181	15	14	193	3	32	------	24
APPLIED RESEARCH	840	313	310	1	72	65	330	5	67	------	53
MANAGEMENT OR ADMINISTRATION (B)	397	144	35	108	45	16	148	6	19	------	35
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	275	124	28	95	29	------	89	1	11	------	21
TEACHING	801	484	151	331	101	31	------	4	82	------	130
PRODUCTION AND INSPECTION	20	7	2	5	4	------	4	------	2	------	3
OTHER	140	54	18	36	5	1	22	4	12	------	43
NOT EMPLOYED	------	------	------	------	------	------	------	------	------	------	------
NO REPORT	116	------	------	------	------	------	------	------	------	------	116
BIOLOGICAL SCIENCES	14,171	5,930	4,308	1,582	930	442	4,227	26	991	------	2,067
RESEARCH AND DEVELOPMENT (A)	6,252	1,217	393	792	271	239	3,546	18	558	------	642
BASIC RESEARCH	4,747	757	------	737	196	174	2,806	5	431	------	552
APPLIED RESEARCH	1,498	455	390	53	74	64	739	13	127	------	90
MANAGEMENT OR ADMINISTRATION (B)	1,062	327	192	132	74	39	526	4	48	------	83
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	635	236	130	106	35	------	286	------	23	------	55
TEACHING	5,921	4,201	3,631	568	567	160	------	4	369	------	780
PRODUCTION AND INSPECTION	19	8	4	2	6	------	1	------	2	------	2
OTHER	431	177	88	88	12	4	154	------	14	------	74
NOT EMPLOYED	------	------	------	------	------	------	------	------	------	------	------
NO REPORT	486	------	------	------	------	------	------	------	------	------	486
PSYCHOLOGY	6,532	2,446	1,312	1,068	566	234	1,430	------	1,550	------	540
RESEARCH AND DEVELOPMENT (A)	1,434	262	56	164	113	100	768	------	232	------	59
BASIC RESEARCH	915	133	------	103	65	62	572	------	104	------	41
APPLIED RESEARCH	506	122	54	56	46	37	195	------	126	------	17
MANAGEMENT OR ADMINISTRATION (B)	808	195	61	124	40	33	339	------	192	------	42
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	289	131	41	82	7	------	107	------	35	------	9
TEACHING	3,444	1,792	1,168	611	331	94	------	------	1,014	------	307
PRODUCTION AND INSPECTION	------	------	------	------	------	------	------	------	------	------	------
OTHER	747	197	27	169	82	7	323	------	112	------	33
NOT EMPLOYED	------	------	------	------	------	------	------	------	------	------	------
NO REPORT.	99	------	------	------	------	------	------	------	------	------	99
STATISTICS	769	346	165	164	43	23	144	11	112	------	113
RESEARCH AND DEVELOPMENT (A)	179	41	12	18	7	6	92	3	25	------	11
BASIC RESEARCH	86	16	------	15	2	2	54	------	9	------	5
APPLIED RESEARCH	89	22	12	------	5	4	37	3	16	------	6
MANAGEMENT OR ADMINISTRATION (B)	76	16	2	12	3	2	39	2	10	------	6
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	45	14	1	11	1	------	21	2	6	------	1
TEACHING	456	277	148	125	32	14	------	5	75	------	67
PRODUCTION AND INSPECTION	5	3	------	3	1	1	------	------	------	------	1
OTHER	30	9	3	6	------	------	13	1	2	------	5
NOT EMPLOYED	------	------	------	------	------	------	------	------	------	------	------
NO REPORT	23	------	------	------	------	------	------	------	------	------	23
ECONOMICS	5,023	2,031	1,116	913	453	130	867	32	758	------	882
RESEARCH AND DEVELOPMENT (A)	844	107	62	45	26	21	544	8	105	------	54
BASIC RESEARCH	367	45	------	45	13	11	250	------	35	------	24
APPLIED RESEARCH	477	62	62	------	13	10	294	8	70	------	30
MANAGEMENT OR ADMINISTRATION (B)	512	78	31	47	55	32	278	5	39	------	57
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	187	53	19	34	23	------	76	2	16	------	17
TEACHING	3,387	1,803	1,008	794	366	75	------	17	592	------	609
PRODUCTION AND INSPECTION	12	5	------	4	2	------	------	------	4	------	1
OTHER	123	38	15	23	4	2	45	2	18	------	16
NOT EMPLOYED	------	------	------	------	------	------	------	------	------	------	------
NO REPORT	145	------	------	------	------	------	------	------	------	------	145
SOCIOLOGY	2,065	896	654	241	251	84	425	1	204	------	288
RESEARCH AND DEVELOPMENT (A)	408	39	13	26	38	34	276	1	35	------	19
BASIC RESEARCH	305	26	------	26	23	22	217	------	24	------	15
APPLIED RESEARCH	103	13	13	------	15	12	59	1	11	------	4
MANAGEMENT OR ADMINISTRATION (B)	210	39	21	18	13	8	135	------	10	------	13
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	110	33	17	16	5	------	60	------	7	------	5
TEACHING	1,372	810	614	196	197	40	------	------	158	------	207
PRODUCTION AND INSPECTION	1	1	------	------	------	------	------	------	------	------	------
OTHER	27	7	6	1	3	2	14	------	1	------	2
NOT EMPLOYED	------	------	------	------	------	------	------	------	------	------	------
NO REPORT	47	------	------	------	------	------	------	------	------	------	47

TABLE A-47.—FIRST AND SECOND WORK ACTIVITY OF SCIENTISTS EMPLOYED AT UNIVERSITIES AND COLLEGES, BY FIELD, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND FIRST WORK ACTIVITY	TOTAL	SECOND WORK ACTIVITY									NOT EMPLOYED	NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER			
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D						
LINGUISTICS	892	347	263	84	84	20	153	------	189		------	119
RESEARCH AND DEVELOPMENT (A)	110	10	3	7	2	1	73	------	20		------	5
BASIC RESEARCH	87	5	------	5	1	1	64	------	13		------	4
APPLIED RESEARCH	22	4	3	1	1	------	9	------	7		------	1
MANAGEMENT OR ADMINISTRATION (B)	88	11	6	5	2	1	64	------	7		------	4
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	33	8	5	3	1	------	21	------	2		------	1
TEACHING	631	323	253	70	78	18	------	------	161		------	69
PRODUCTION AND INSPECTION	-------	------	------	------	------	------	------	------	------		------	------
OTHER	29	3	1	2	2	------	16	------	1		------	7
NOT EMPLOYED	-------	------	------	------	------	------	------	------	------		------	------
NO REPORT	34	------	------	------	------	------	------	------	------		------	34
OTHER FIELDS	3,294	1,147	663	383	329	106	452	33	513		------	820
RESEARCH AND DEVELOPMENT (A)	582	175	53	80	41	35	209	16	69		------	72
BASIC RESEARCH	295	64	------	56	9	8	144	1	33		------	44
APPLIED RESEARCH	217	79	43	2	18	18	60	9	29		------	22
MANAGEMENT OR ADMINISTRATION (B)	385	92	26	33	28	22	181	5	47		------	32
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	164	73	18	29	6	------	47	5	22		------	11
TEACHING	2,085	838	566	255	247	46	------	9	383		------	608
PRODUCTION AND INSPECTION	20	8	------	3	2	------	4	1	1		------	4
OTHER	150	34	18	12	11	3	58	2	13		------	32
NOT EMPLOYED	-------	------	------	------	------	------	------	------	------		------	------
NO REPORT	72	------	------	------	------	------	------	------	------		------	72

(A)INCLUDES DEVELOPMENT OR DESIGN NOT SEPARATELY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-48.—FIRST AND SECOND WORK ACTIVITY OF SCIENTISTS EMPLOYED AT UNIVERSITIES AND COLLEGES, BY HIGHEST DEGREE, 1964

HIGHEST DEGREE AND FIRST WORK ACTIVITY	TOTAL	SECOND WORK ACTIVITY								NOT EMPLOYED	NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER		
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D					
ALL DEGREES	69,762	26,959	18,008	7,773	5,151	2,010	15,644	348	7,798	------	13,862
RESEARCH AND DEVELOPMENT (A)	25,726	5,224	1,449	2,877	1,205	1,077	12,099	193	2,533	------	4,472
BASIC RESEARCH	19,879	3,154	------	2,580	762	693	9,990	59	1,846	------	4,068
APPLIED RESEARCH	5,399	1,793	1,347	122	381	336	2,083	109	655	------	378
MANAGEMENT OR ADMINISTRATION (B)	5,299	1,500	703	680	364	213	2,486	52	485	------	412
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	2,725	1,161	516	551	151	------	1,007	24	190	------	192
TEACHING	33,951	19,266	15,389	3,760	3,411	679	------	71	4,537	------	6,666
PRODUCTION AND INSPECTION	245	125	36	60	28	9	19	14	23	------	36
OTHER	2,640	844	431	396	143	32	1,040	18	220	------	375
NOT EMPLOYED	-------	------	------	------	------	------	------	------	------	------	------
NO REPORT	1,901	------	------	------	------	------	------	------	------	------	1,901
PH.D. DEGREE	41,539	17,992	13,496	4,164	3,603	1,429	10,590	61	3,921	------	5,372
RESEARCH AND DEVELOPMENT (A)	13,626	2,051	657	1,146	780	716	8,234	32	895	------	1,634
BASIC RESEARCH	11,008	1,230	------	1,065	560	517	6,990	7	685	------	1,536
APPLIED RESEARCH	2,518	767	635	49	197	178	1,237	21	202	------	94
MANAGEMENT OR ADMINISTRATION (B)	3,851	993	551	406	285	170	1,975	8	308	------	282
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	1,927	760	397	331	115	------	812	3	112	------	125
TEACHING	22,186	14,705	12,212	2,450	2,458	528	------	18	2,630	------	2,375
PRODUCTION AND INSPECTION	27	10	2	7	3	2	11	------	2	------	1
OTHER	853	233	74	155	77	13	370	3	86	------	84
NOT EMPLOYED	-------	------	------	------	------	------	------	------	------	------	------
NO REPORT	996	------	------	------	------	------	------	------	------	------	996
PROFESSIONAL MEDICAL DEGREE	2,978	979	386	591	183	121	1,246	2	245	------	323
RESEARCH AND DEVELOPMENT (A)	1,565	240	66	172	62	53	1,022	------	139	------	102
BASIC RESEARCH	932	136	------	134	34	30	598	------	86	------	78
APPLIED RESEARCH	630	102	65	37	28	23	423	------	53	------	24
MANAGEMENT OR ADMINISTRATION (B)	268	77	23	54	24	15	142	------	12	------	13
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	175	59	15	44	9	------	93	------	7	------	7
TEACHING	793	563	259	304	92	49	------	2	92	------	44
PRODUCTION AND INSPECTION	2	2	2	------	------	------	------	------	------	------	------
OTHER	204	97	36	61	5	4	82	------	2	------	18
NOT EMPLOYED	-------	------	------	------	------	------	------	------	------	------	------
NO REPORT	146	------	------	------	------	------	------	------	------	------	146
MASTER'S DEGREE	17,011	5,377	2,822	2,079	1,093	306	2,299	140	2,585	------	5,517
RESEARCH AND DEVELOPMENT (A)	5,960	1,784	468	954	226	189	1,619	73	840	------	1,418
BASIC RESEARCH	4,263	1,086	------	866	99	86	1,265	22	551	------	1,240
APPLIED RESEARCH	1,532	601	433	26	99	85	344	41	278	------	169
MANAGEMENT OR ADMINISTRATION (B)	825	269	85	145	32	18	304	21	111	------	88
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	399	212	72	113	14	------	82	8	41	------	42
TEACHING	8,736	2,988	2,106	824	775	87	------	38	1,536	------	3,399
PRODUCTION AND INSPECTION	90	45	11	23	13	2	4	4	10	------	14
OTHER	945	291	152	133	47	10	372	4	88	------	143
NOT EMPLOYED	-------	------	------	------	------	------	------	------	------	------	------
NO REPORT	455	------	------	------	------	------	------	------	------	------	455
BACHELOR'S DEGREE	7,892	2,501	1,252	904	250	140	1,448	130	1,006	------	2,557
RESEARCH AND DEVELOPMENT (A)	4,411	1,112	254	587	126	111	1,172	78	641	------	1,282
BASIC RESEARCH	3,562	681	------	500	65	58	1,092	30	511	------	1,183
APPLIED RESEARCH	677	311	211	10	51	45	72	40	117	------	86
MANAGEMENT OR ADMINISTRATION (B)	332	153	41	73	23	10	58	22	50	------	26
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	209	123	30	61	13	------	17	12	27	------	17
TEACHING	2,124	952	769	168	77	11	------	13	264	------	818
PRODUCTION AND INSPECTION	118	64	20	29	11	4	4	8	11	------	20
OTHER	619	220	168	47	13	4	214	9	40	------	123
NOT EMPLOYED	-------	------	------	------	------	------	------	------	------	------	------
NO REPORT	288	------	------	------	------	------	------	------	------	------	288
LESS THAN BACHELOR'S DEGREE	78	30	4	10	4	4	8	7	16	------	13
RESEARCH AND DEVELOPMENT (A)	45	18	3	6	3	3	7	4	9	------	4
BASIC RESEARCH	20	6	------	3	------	------	6	------	6	------	2
APPLIED RESEARCH	19	9	3	------	2	2	1	2	3	------	2
MANAGEMENT OR ADMINISTRATION (B)	10	5	------	2	------	------	1	------	3	------	1
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	7	5	------	2	------	------	------	------	2	------	------
TEACHING	8	3	1	1	------	------	------	------	1	------	4
PRODUCTION AND INSPECTION	4	2	------	1	------	------	------	1	------	------	1
OTHER	10	2	------	------	1	1	------	2	3	------	2
NOT EMPLOYED	-------	------	------	------	------	------	------	------	------	------	------
NO REPORT	1	------	------	------	------	------	------	------	------	------	1

TABLE A-48.—FIRST AND SECOND WORK ACTIVITY OF SCIENTISTS EMPLOYED AT UNIVERSITIES AND COLLEGES, BY HIGHEST DEGREE, 1964—CONTINUED

HIGHEST DEGREE AND FIRST WCRK ACTIVITY	TOTAL	SECOND WORK ACTIVITY								NOT EMPLOYED	NO REPORT OF WORK ACTIVITY
		RESEARCH AND DEVELOPMENT			MANAGEMENT OR ADMINISTRATION		TEACHING	PRODUCTION AND INSPECTION	OTHER		
		TOTAL (A)	BASIC RESEARCH	APPLIED RFSEARCH	TOTAL (B)	OF R+D					
NO REPORT OF DEGREE	264	80	48	25	18	10	53	8	25	------	80
RESEARCH AND DEVELOPMENT (A)	119	19	1	12	8	5	45	6	9	------	32
BASIC RESEARCH	94	15	------	12	4	2	39	------	7	------	29
APPLIED RESEARCH	23	3	------	------	4	3	6	5	2	------	3
MANAGEMENT OR ADMINISTRATION (B)	13	3	3	------	------	------	6	1	1	------	2
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	8	2	2	------	------	------	3	1	1	------	1
TEACHING	104	55	42	13	9	4	------	------	14	------	26
PRODUCTION AND INSPECTION	4	2	1	------	1	1	------	1	------	------	------
OTHER	9	1	1	------	------	------	2	------	1	------	5
NOT EMPLOYED	------	------	------	------	------	------	------	------	------	------	------
NO REPORT	15	------	------	------	------	------	------	------	------	------	15

(A)INCLUDES DEVELOPMENT OR DESIGN NOT SEPARATFLY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIEC.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-49.—NUMBER OF UNIVERSITY AND COLLEGE TEACHERS, BY STATE AND FIELD, 1964

STATE	TOTAL	SCIENTIFIC AND TECHNICAL FIELD												
		CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELDS
ALL LOCATICNS	49,595	8,435	2,784	237	6,406	5,241	1,498	10,148	4,874	600	4,254	1,797	784	2,537
ALABAMA	440	88	14	------	47	49	23	103	35	6	30	17	2	26
ALASKA	49	4	10	2	6	8	2	7	2	1	3	------	2	2
ARIZONA	535	81	41	6	64	58	29	79	63	6	54	13	7	34
ARKANSAS	271	55	16	2	19	23	19	69	22	3	25	4	1	13
CALIFORNIA	4,989	698	339	25	680	546	144	1,026	562	55	401	171	92	250
COLORADO	738	119	69	7	99	68	30	140	78	10	43	21	7	47
CONNECTICUT	913	146	37	3	136	86	14	184	101	11	96	37	22	40
DELAWARE	128	37	5	------	17	12	5	21	9	------	12	5	1	4
DIST. OF COL.	482	78	15	------	64	42	------	109	51	3	48	19	32	21
FLORIDA	937	140	51	14	106	85	35	227	111	6	71	25	10	56
GEORGIA	682	125	26	2	84	62	28	157	76	16	52	18	4	32
HAWAII	190	25	12	4	11	11	14	37	19	1	16	10	19	11
IDAHO	188	35	15	2	14	18	18	39	16	------	19	2	2	8
ILLINOIS	2,849	470	169	14	353	329	55	528	292	36	310	100	55	138
INDIANA	1,592	304	71	------	229	181	42	255	158	20	167	57	28	80
IOWA	1,000	184	40	4	126	83	36	217	90	19	106	31	9	55
KANSAS	755	147	52	4	71	75	31	165	67	8	73	18	8	36
KENTUCKY	496	89	22	2	51	38	22	137	38	2	32	34	3	26
LOUISIANA	737	136	47	------	76	88	29	192	47	10	51	21	7	33
MAINE	192	35	11	------	22	23	12	35	15	2	21	7	1	8
MARYLAND	869	153	25	1	163	90	18	212	70	10	52	25	6	44
MASSACHUSETTS	2,352	451	105	14	412	224	17	389	228	24	238	97	30	123
MICHIGAN	2,149	342	127	10	233	236	63	399	243	30	194	91	62	119
MINNESOTA	1,055	181	48	6	122	120	46	241	108	20	79	35	7	42
MISSISSIPPI	279	38	17	------	20	26	24	71	24	1	26	12	1	19
MISSOURI	1,050	187	76	5	103	97	36	219	90	10	114	49	6	58
MONTANA	217	36	20	------	14	27	20	48	11	3	18	7	3	10
NEBRASKA	417	56	21	1	51	47	21	94	43	6	47	14	1	15
NEVADA	91	13	10	------	12	8	8	11	8	------	15	2	2	2
NEW HAMPSHIRE	291	64	18	1	42	24	10	67	17	1	28	11	2	6
NEW JERSEY	1,105	167	44	5	200	134	25	178	103	21	92	42	12	82
NEW MEXICO	274	38	26	3	48	39	12	40	21	2	22	6	4	13
NEW YORK	5,302	916	189	24	803	516	72	1,081	5[illegible]0	63	446	204	102	296
NORTH CAROLINA	1,177	188	63	2	110	131	49	330	102	20	73	54	12	43
NORTH DAKOTA	180	42	15	------	11	21	16	34	15	------	17	3	------	6
OHIO	2,164	381	138	3	313	222	35	376	229	28	204	101	27	107
OKLAHOMA	576	96	38	5	66	66	27	132	45	10	45	13	2	31
OREGON	745	129	63	4	59	76	48	153	80	6	54	27	6	40
PENNSYLVANIA	2,943	567	147	9	395	293	52	566	300	36	259	104	46	169
RHODE ISLAND	332	51	22	1	67	36	11	50	29	1	23	15	9	17
SOUTH CAROLINA	362	81	10	1	44	54	22	70	16	2	24	12	1	25
SOUTH DAKOTA	195	34	11	------	20	24	17	36	15	4	17	8	------	9
TENNESSEE	750	147	36	------	94	92	29	186	70	5	37	16	6	32
TEXAS	1,810	321	139	20	228	213	44	365	149	23	129	56	40	83
UTAH	460	64	29	7	56	50	25	114	49	8	19	16	7	16
VERMONT	170	37	8	------	13	16	7	47	14	------	15	5	1	7
VIRGINIA	790	125	36	2	98	100	31	190	68	15	60	26	6	33
WASHINGTON	978	172	68	7	97	116	38	205	84	12	82	33	12	52
WEST VIRGINIA	311	67	12	------	28	30	17	72	21	1	28	16	3	16
WISCONSIN	1,292	222	93	10	142	145	37	260	110	14	114	59	24	62
WYOMING	127	24	12	------	10	15	12	25	11	1	10	2	------	5
PUERTO RICO	118	25	3	2	9	9	2	31	7	2	8	3	9	8
FOREIGN	501	24	53	3	48	59	19	129	52	6	35	23	23	27

NOTE - INCLUDES SCIENTISTS REPORTING COLLEGE OR UNIVERSITY TEACHING AS A FIRST OR SECOND WORK ACTIVITY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-50.—NUMBER OF UNIVERSITY AND COLLEGE TEACHERS, BY STATE AND ACADEMIC RANK, 1964

STATE	TOTAL	ACADEMIC RANK									NO REPORT OF ACADEMIC RANK
		DEAN	PROFESSOR	ASSOCIATE PROFESSOR	ASSISTANT PROFESSOR	INSTRUCTOR	LECTURER	RESEARCH ASSOCIATE	RESEARCH ASSISTANT	OTHER	
ALL LOCATIONS	49,595	145	13,086	10,381	11,343	4,183	709	235	3,367	1,337	4,809
ALABAMA	440	1	153	98	86	33	2	1	17	14	35
ALASKA	49	------	8	7	26	4	------	------	1	2	1
ARIZONA	535	2	123	119	104	29	5	1	62	24	66
ARKANSAS	271	3	85	67	53	19	------	------	8	6	30
CALIFORNIA	4,989	9	1,266	997	1,126	336	151	20	360	104	620
COLORADO	738	1	172	165	181	54	5	5	62	15	78
CONNECTICUT	913	3	213	185	252	81	25	8	60	27	59
DELAWARE	128	1	25	26	31	13	1	1	8	11	11
DISTRICT OF COLUMBIA	482	1	129	111	121	44	7	1	15	8	45
FLORIDA	937	3	255	188	210	72	5	5	54	21	124
GEORGIA	682	3	191	176	151	45	3	1	40	13	58
HAWAII	190	------	45	42	56	13	1	------	4	8	21
IDAHO	188	2	37	49	45	10	1	------	13	5	26
ILLINOIS	2,849	10	799	540	607	272	30	18	217	58	298
INDIANA	1,592	7	419	337	336	128	24	5	147	61	128
IOWA	1,000	2	297	192	236	79	------	2	69	42	81
KANSAS	755	2	210	156	175	66	2	1	46	26	71
KENTUCKY	496	1	135	117	128	47	1	------	11	5	51
LOUISIANA	737	1	195	159	159	63	3	------	50	21	86
MAINE	192	4	53	37	41	18	1	------	9	7	22
MARYLAND	869	------	206	171	209	87	11	5	65	33	82
MASSACHUSETTS	2,352	5	591	422	526	220	60	44	176	95	213
MICHIGAN	2,149	4	600	379	420	179	42	5	181	93	246
MINNESOTA	1,055	2	301	190	218	133	11	3	82	16	99
MISSISSIPPI	279	2	93	71	45	21	------	------	6	3	38
MISSOURI	1,050	1	276	230	238	107	10	------	64	32	92
MONTANA	217	------	53	44	60	17	------	------	16	7	20
NEBRASKA	417	1	119	92	88	39	------	------	30	8	40
NEVADA	91	3	18	26	26	5	4	1	2	2	4
NEW HAMPSHIRE	291	1	82	58	61	28	1	1	16	18	25
NEW JERSEY	1,105	2	274	229	295	92	18	5	95	18	77
NEW MEXICO	274	------	83	61	61	8	2	------	23	6	30
NEW YORK	5,302	14	1,285	1,150	1,276	503	124	35	329	143	443
NORTH CAROLINA	1,177	5	393	255	227	83	5	13	62	19	115
NORTH DAKOTA	180	1	38	43	58	11	------	------	11	6	12
OHIO	2,164	3	558	457	515	211	15	4	157	68	176
OKLAHOMA	576	2	153	122	116	52	1	------	56	20	54
OREGON	745	4	203	182	166	54	5	------	65	11	55
PENNSYLVANIA	2,943	5	719	682	738	252	28	25	165	91	238
RHODE ISLAND	332	2	102	75	80	9	1	1	32	6	24
SOUTH CAROLINA	362	3	101	92	97	13	------	------	16	13	27
SOUTH DAKOTA	195	------	62	41	50	11	------	------	4	4	23
TENNESSEE	750	3	211	186	166	57	1	4	45	20	57
TEXAS	1,810	10	480	350	409	173	20	4	116	47	201
UTAH	460	1	129	110	99	24	3	1	37	7	49
VERMONT	170	1	40	40	38	15	1	1	6	5	23
VIRGINIA	790	5	240	204	187	60	4	1	20	8	61
WASHINGTON	978	5	249	191	211	86	12	1	98	17	108
WEST VIRGINIA	311	------	98	67	76	31	1	------	7	10	21
WISCONSIN	1,292	3	344	255	292	122	8	8	105	18	137
WYOMING	127	------	39	19	28	18	------	------	6	3	14
PUERTO RICO	118	------	38	25	24	14	2	------	------	------	15
FOREIGN	501	1	98	94	119	21	52	4	21	12	79

NOTE - INCLUDES SCIENTISTS REPORTING COLLEGE AND UNIVERSITY TEACHING AS A FIRST OR SECOND WORK ACTIVITY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

APPENDIX B

1964 Questionnaire and Specialties List

PLEASE DO NOT WRITE IN THIS COLUMN

NATIONAL REGISTER
OF SCIENTIFIC AND TECHNICAL PERSONNEL

IN THE FIELD OF **CHEMISTRY** CONDUCTED BY THE
AMERICAN CHEMICAL SOCIETY
1155 SIXTEENTH STREET, N.W., WASHINGTON, D. C. 20036
AND THE NATIONAL SCIENCE FOUNDATION

And in other fields of science by the American Economic Association, American Geological Institute, American Institute of Biological Sciences, American Institute of Physics, American Mathematical Society, American Meteorological Society, American Psychological Association, American Sociological Association, Federation of American Societies for Experimental Biology, and the Center for Applied Linguistics of The Modern Language Association of America.

PLEASE PRINT ANSWERS IN DARK INK OR TYPE

IF YOUR NAME OR ADDRESS AT LEFT IS INCORRECT, PLEASE ENTER CORRECT INFORMATION BELOW:
PLEASE GIVE FULL NAME

....
....
....
....

PLEASE BE SURE YOUR POSTAL ZIP CODE IS INDICATED.

NOTE: If you have received and completed a National Register questionnaire from one of the other organizations listed above since March 1, 1964, please write the name of the organization here ....; also, please complete item 1, and on the back of the questionnaire, give your social security number, date and signature, and return in the enclosed envelope.

VITA:

1. DATE OF BIRTH Month | Day | Year	2. STATE OR COUNTRY OF BIRTH	3. STATE OR COUNTRY OF SECONDARY SCHOOL GRADUATION	4. SEX ☐ 1 - MALE ☐ 2 - FEMALE

5. CITIZENSHIP (check one)
☐ 6 - USA
☐ 7 - USA APPLIED FOR
☐ 8 - NON-USA, permanent resident (specify country)..
☐ 9 - NON-USA (specify country)..

6. I regard myself professionally as a (an): (check only one)
☐ X0 - Astronomer
☐ 20 - Biologist
☐ 38 - Medical Scientist
☐ 40 - Chemist
☐ 50 - Economist
☐ X9 - Engineer
☐ 10 - Geologist
☐ 60 - Linguist
☐ 70 - Mathematician
☐ 00 - Meteorologist
☐ 80 - Physicist
☐ 90 - Psychologist
☐ B0 - Sociologist
☐ 7B - Statistician
☐ XX - Other (specify) ....

and more specifically as a (an): (check only one)
☐ X1 - Agricultural and Food Chemist
☐ 40 - Analytical Chemist
☐ X2 - Biochemist
☐ 43 - Chemical Engineer
☐ 41 - Inorganic Chemist
☐ 42 - Organic Chemist
☐ X6 - Physical Chemist
☐ - Other (specify) ....

EDUCATION:

7. COLLEGE, UNIVERSITY, OR OTHER INSTITUTION (Include city and state)	EARNED DEGREE, IF ANY	YEAR OF DEGREE	MAJOR	MINOR

CURRENT PROFESSIONAL EMPLOYMENT:

8. Please check the box which most fully describes your current employment status. Check only one.
☐ 1 - Full-time professionally employed
☐ 2 - Part-time professionally employed
☐ 3 - Full-time professionally employed, part-time student
☐ 4 - Student, part-time employed (Graduate Assistants use this code)
☐ 5 - Student, not employed
☐ 6 - Not employed, and seeking employment
☐ 7 - Not employed, and not seeking employment
☐ 8 - Employed, but not in professional work
☐ 9 - Retired

9. Please give name of present principal employer and actual place of employment. (If not employed currently, omit items 9 through 15. Begin again with item 16.)

.... Name of present principal employer
.... Actual place of employment (city and state)

10. Check the box of the category which is most appropriate for your present principal employer. Check only one.
☐ 1 - PRIVATE INDUSTRY OR BUSINESS
☐ A - SELF-EMPLOYED
☐ 2 - COLLEGE OR UNIVERSITY, OTHER THAN MEDICAL SCHOOL (specify department or other organizational unit) ....
☐ B - SECONDARY SCHOOL OR SCHOOL SYSTEM
☐ K - MEDICAL SCHOOL
☐ 3 - FEDERAL GOVERNMENT—CIVILIAN EMPLOYEE
☐ C - USPHS—COMMISSIONED CORPS
☐ L - MILITARY SERVICE—ACTIVE DUTY
☐ 4 - STATE GOVERNMENT
☐ D - COUNTY GOVERNMENT
☐ M - MUNICIPAL GOVERNMENT
☐ U - OTHER GOVERNMENT AGENCY (specify) ....
☐ 5 - NONPROFIT HOSPITAL OR CLINIC
☐ E - NONPROFIT ORGANIZATION, OTHER THAN HOSPITAL, CLINIC, OR EDUCATIONAL INSTITUTION
☐ 9 - OTHER (specify) ....

11. Please give the principal service you perform or product on which you work. ....

12. From the accompanying specialties list, select the scientific specialization most closely related to your PRESENT employment and enter both the number and specialty title on the lines below.

.... Number
.... Specialty Title

NSF FORM MAY 1964 9C-13c

BUDGET BUREAU NO. 99-R022.7
APPROVAL EXPIRES OCTOBER 31, 1965

CURRENT PROFESSIONAL EMPLOYMENT CONTINUED

PLEASE DO NOT WRITE IN THIS COLUMN

13. Number your first and second most important kind of activity, in terms of working time devoted, by entering "1" and "2" on the appropriate lines below.

.... 1 - MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	.... 4 - DEVELOPMENT OR DESIGN
.... A - MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT	.... 6 - PRODUCTION, OPERATIONS, MAINTENANCE, EXPLOITATION, PROCESSING, ECONOMICS, EVALUATION
.... 2 - BASIC RESEARCH	.... 8 - CONSULTING (specify) ....
.... B - APPLIED RESEARCH	.... F - QUALITY CONTROL, INSPECTION, TESTING, TECHNICAL SERVICES
.... 3 - TEACHING (State Academic Rank)	.... W - SALES, MARKETING, PURCHASING, ESTIMATING
.... C - REPORT OR OTHER TECHNICAL WRITING, EDITING	.... 9 - OTHER (specify) ....

14. Is ANY of your work being supported or sponsored by U. S. Government funds? ☐ Yes ☐ No ☐ Don't know
If yes, is your work related to any of the following programs:

☐ 1 - Agriculture
☐ 2 - Atomic energy
☐ 3 - Defense
☐ 4 - Education
☐ 5 - Health
☐ 6 - International
☐ 7 - Natural resources
☐ 8 - Public works
☐ 9 - Space
☐ 0 - Other program (specify) ....

NOTE: Salary and income information is regarded as confidential and will be used for statistical purposes only. It will *NOT* be released in any way that will allow it to be identified with you.

15. BASIC ANNUAL SALARY (JAN. 1964): Please give the basic annual salary associated with your principal professional employment as of Jan. 1964. $........

If academically employed, check whether salary is for ☐ 9-10 mos. or ☐ 11-12 mos.

(Basic Annual Salary is your annual salary before deductions for income tax, social security, retirement, etc., but does not include bonuses, overtime, summer teaching, or other payment for professional work.) Do not include rental or subsistence allowances.

16. ESTIMATED GROSS ANNUAL PROFESSIONAL INCOME (Jan. 1 to Dec. 31, 1964): Please give your estimated gross professional income from all professional activities for the year which will end December 31, 1964. $........

(Gross Annual Professional Income is ALL payment received for professional activities including basic salary before deductions, plus bonuses, royalties, fees, honoraria, rental and subsistence allowances, etc.)

17. How many years of professional work experience have you had? ☐

SCIENTIFIC COMPETENCE:

18. From the accompanying specialties list, select and enter on the lines below in decreasing order the four specialties in which you consider you have your greatest scientific competence, based on your total educational and work experience.

Greatest: .... Number .... Specialty Title
Third: .... Number .... Specialty Title
Second: .... Number .... Specialty Title
Fourth: .... Number .... Specialty Title

LANGUAGE AND AREA KNOWLEDGES:

19. FOREIGN LANGUAGE: List the languages (other than English) in which you have knowledge and indicate with a check mark (√) your proficiencies.

If you have no foreign language competence, check here. ☐

NAME OF LANGUAGE(S)	PROFICIENCY								
	CAN PREPARE AND DELIVER LECTURES		CAN CONVERSE		HAVE FACILITY TO TRANSLATE TECHNICAL JOURNALS		CAN READ TECHNICAL ARTICLES FOR OWN USE		SOME KNOWLEDGE, BUT CAN'T USE AS A MEDIUM OF COMMUNICATION 9
	FLUENTLY 1	SUPERFICIALLY 2	FLUENTLY 3	PASSABLY 4	INTO ENGLISH 5	FROM ENGLISH 6	EASILY 7	WITH DIFFICULTY 8	

20. AREA KNOWLEDGE: List the foreign countries or U. S. geographic areas in which you have a professional specialization gained by residence, research, or travel.

COUNTRY OR AREA	TOTAL YEARS RESIDENCE OR SPECIALIZATION	YEAR LAST VISITED OR SPECIALIZED	NATURE OF YOUR KNOWLEDGE OR SPECIALIZATION

21. SOCIETY MEMBERSHIP: Circle the number in front of all societies of which you are a member. For write-ins include only national professional societies and use identifying words in full:

501. AMERICAN CHEMICAL SOCIETY
502. AMERICAN INSTITUTE OF CHEMISTS
503. AMERICAN INSTITUTE OF CHEMICAL ENGINEERS
504. AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE
505. OTHERS (specify) ....
528. NONE

22. Please give, if possible, a mailing or forwarding address through which you can always be reached, different from address on reverse side.

....
C/O Number Street City State Zip Code

DATE PREPARED:	SIGNATURE: (Please Sign Full Name)
SOCIAL SECURITY NO. ☐ ☐ ☐	

23. If you wish to add to the above information concerning your professional employment(s) or qualifications, please comment below or on an attached sheet, referring to item numbers where appropriate.

ACS

SPECIALTIES LIST

FOR USE WITH

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL

This list includes a number of subfields and appropriate specialties within these subfields. The Engineering and Other Specialties subfields are not designed to give detailed specialty coverage. This "universal" list is presented in order that you may identify specialties in which you may be competent in related fields.

The sections CURRENT PROFESSIONAL EMPLOYMENT and SCIENTIFIC COMPETENCE on the 1964 National Register Questionnaire request that you indicate from this list the specialties which are most closely related to your present employment and in which you consider you have your greatest professional competence (items 12 and 18).

Please use the specific specialties and their numbers as indicated; if you find it necessary to select the "Other (specify)" category, write in the code number and give your own brief specialty title in items 12 and 18 on the Questionnaire.

Chemistry

Analytical Chemistry

4001—Absorption spectroscopy
4002—Biochemical analysis
4003—Chemical and electron spectroscopy
4004—Chromatographic analysis
4005—Distillation analysis
4006—Electrochemical analysis
4007—Electron spin resonance spectroscopy
4008—Elemental analysis
4010—Emission spectroscopy
4011—Extraction analysis
4012—Fluorimetry
4013—Gas analysis
4014—Gravimetry
4015—Instrument design and development
4016—Mass spectrometry
4017—Microchemical analysis
4018—Nucleonics
4019—Nuclear magnetic resonance spectroscopy
4020—Optical rotatory dispersion
4021—Raman spectrometry
4022—Titrimetry
4023—X-ray and electron diffraction
4009—Other (specify)

Inorganic Chemistry

4101—Alkalies and alkaline earths
4102—Atomic structure
4103—Boron and silicon compounds
4104—Building materials
4105—Coordination compounds
4106—Electronic materials; semiconductors ferroelectrics, ferromagnetics
4107—Explosives, rocket fuels
4108—Gaseous elements
4110—Glass, fused silica
4111—Halogen family
4112—Industrial carbon, graphite, carbon black
4113—Inner-transition elements, lanthanide series and actinide series
4114—Inorganic equilibria and phase relationships
4184—Inorganic nomenclature and symbolism
4115—Inorganic reaction kinetics and mechanisms
4116—Metals and alloys
4117—Molecular and crystal structure
4118—Nonmineral products; asbestos, vermiculite, etc.
4119—Pigments and industrial minerals
4120—Radiochemistry, minerals and products
4121—Solutions and solvent theory
4122—Synthetic inorganic chemistry
4123—Theoretical inorganic chemistry
4124—Transition elements
4125—Water chemistry
4109—Other (specify)

Organic Chemistry

4201—Adhesives
4202—Agricultural chemicals
4203—Aliphatic chemistry
4204—Alkaloids
4254—Amino acids and proteins
4258—Antiobiotics
4205—Aromatic hydrocarbons, derivatives
4263—Carbohydrates
4206—Coal
4207—Dyestuffs
4208—Elastomers and related products
4210—Emulsions
4211—Explosives and rocket fuels
4212—Fluorine compounds
4213—Free radicals
4214—Heterocyclics
4215—Hydrogenation
4216—Oils, fats, waxes
4217—Organometallics
4218—Petroleum, petrochemicals, other lubricants
4219—Pharmaceuticals
4220—Phosphorus compounds
4221—Photo products
4222—Plastics and synthetic resins
4223—Protective coatings
4224—Reaction mechanisms
4225—Silicon compounds
4226—Small ring compounds
4227—Soaps, detergents, surfactants
4228—Stereochemistry
4292—Steroids
4229—Structure of organic molecules
4230—Terpenes and other alicyclics
4231—Textiles and synthetic fabrics
4232—Wood, paper, and cellulose
4209—Other (specify)

Related Chemical Specialties

4301—Adsorption and absorption
4302—Chemical separation
4303—Corrosion and preservation
4304—Electrochemical operations
4305—Chemical economics
4306—Fuels and combustion
4307—Fluid flow
4308—Heat transfer
4310—Mass transfer
4311—Materials handling
4312—Measurement and control
4313—Mechanical separation
4314—Mixing
4315—Nuclear processes
4316—Operational analysis
4317—Pilot plant
4318—Plant and process design
4319—Quality control and standards
4309—Other (specify)

4909—Chemistry, other (specify)

Physics

Acoustics

8001—Applied acoustics, instruments and apparatus
8002—Architectural acoustics
8003—Ear and hearing
8004—Electroacoustics
8005—Infrasonics
8006—Mechanical vibrations and shock
8007—Musical instruments and music
8008—Noise
8010—Speech communications
8011—Theory of waves and vibrations
8012—Ultrasonics
8013—Underwater sound
8009—Other (specify)

Atomic and Molecular Physics

8101—Atomic, ionic and molecular beams
8102—Atomic masses and abundance
8103—Atomic structure and spectra
8104—Chemical bonds and structure
8105—Electron paramagnetic resonance
8106—Impact and scattering phenomena
8107—Mass spectroscopy
8108—Molecular structure and spectra
8110—Nuclear magnetic resonance
8109—Other (specify)

Electromagnetism

8201—Antenna theory
8278—Electrical measurements and instruments
8202—Electromagnetic waves
8203—Electromagnetic wave propagation
8204—Electron dynamics
8205—Electron microscopy, ion optics
8206—Gas discharge
8207—Magnetism
8208—Masers and such devices
8210—Microwaves
8211—Physical electronics
8212—Quantum electronics
8213—X-ray interactions
8214—X-ray phenomena
8215—X-ray technology
8209—Other (specify)

Elementary Particles

8301—Cosmic rays
8302—High energy accelerators
8303—High energy phenomena
8304—Particle detectors
8305—Phenomenological computer analysis
8309—Other (specify)

Mechanics

8401—Analytical mechanics
8402—Ballistics and flight dynamics
8403—Elasticity
8404—Friction
8405—High pressure physics
8406—Impact phenomena
8478—Instruments and measurements
8409—Other (specify)

Nuclear Physics

8501—Accelerators, detectors
8502—Neutrons
8503—Nuclear properties
8504—Nuclear reactions and scattering
8505—Nuclear spectroscopy
8506—Radiation effects
8507—Radioactive materials, isotopes
8508—Reactors
8510—Shielding
8509—Other (specify)

Optics

8601—Atmospheric and space optics
8602—Color, colorimetry
8603—Fiber optics
8604—Geometrical optics
8605—Information theory, communications, image evaluation
8606—Infrared phenomena
8607—Interferometry
8608—Lasers
8610—Lenses
8611—Optical instruments, techniques and devices
8612—Optical materials
8613—Photography, illumination
8614—Physical optics
8615—Physiological optics
8616—Properties of thin films
8617—Radiometry, photometry
8618—Spectroscopy
8609—Other (specify)

Physics of Fluids

8701—Aerodynamics
8702—Aerosols
8703—Boundary layer effects
8704—Cavities and jets
8705—Compressible fluid dynamics
8706—Explosion phenomena
8707—High temperature flow
8708—Incompressible fluid dynamics
8710—Magneto fluid dynamics
8711—Plasma physics
8712—Rarefied gas flow
8713—Rheology (incl. plastic flow)
8714—Shock wave phenomena
8715—Structure and properties of fluids
8716—Superfluidity
8717—Transport phenomena, diffusion
8718—Turbulence
8719—Viscosity
8709—Other (specify)

Solid State Physics

8801—Ceramics
8802—Cooperative phenomena
8867—Crystallography
8803—Dielectrics (incl. fluids)
8804—Dislocations and plasticity
8805—Dynamics of crystal lattices
8806—Electrical properties of surfaces and junctions
8807—Electron emission
8808—Ferromagnetism
8810—High polymers and glasses
8811—Internal friction
8812—Lattice effects and diffusion
8813—Luminescence
8814—Optical properties
8815—Para- and diamagnetism phenomena
8816—Photoconductivity and related phenomena
8817—Photoelectric phenomena
8818—Piezo and ferro-electricity
8819—Quantum mechanics of solids
8820—Radiation damage
8821—Resonance phenomena
8822—Semiconductors
8823—Superconductivity
8824—Surface structure and kinetics
8825—Thermal conduction in solid state
8826—Thin films
8809—Other (specify)

Thermal Physics

8B01—Calorimetry
8B02—Heat transmission
8B03—High temperature physics
8B04—Low temperature physics
8B05—Temperature and its measurement
8B06—Thermal properties
8B95—Thermodynamics
8B07—Thermodynamic relations, equations of state
8B08—Thermodynamic tables
8B09—Other (specify)

Other Physics Specialties

8X53—Constants, standards, units, metrology, conversion factors
8X02—Energy conversion problems
8X03—Field theory
8X04—High vacuum techniques
8X05—Many body theory
8X06—Mathematical physics
8X07—Mossbauer effect
8X08—Quantum mechanics
8X10—Relativity and gravitation
8X11—Statistical mechanics and kinetic theory

8909—Physics, other (specify)

Astronomy

X001—Astrometry
X002—Astrophysics
X003—Celestial mechanics
X004—Comets, meteors, interplanetary medium
X005—Cosmology and cosmogony
X006—Design of astronomical instruments
X007—Galaxies
X008—Navigation, geodetic astronomy
X010—Origin of cosmic rays
X011—Photometry of astronomical sources
X012—Physics of the interstellar medium
X013—Planets, satellites
X014—Radio astronomy
X015—Space astronomy
X016—Spectroscopy of astronomical sources
X017—Star systems and statistical astronomy
X018—Stellar energy generation, nucleogenesis, stellar evolution
X019—The sun
X020—Variable stars
X009—Other (specify)

NSF FORM
MAR. 1964 9C-14x

BUDGET BUREAU NO.

Atmospheric, Lithospheric, and Hydrospheric Specialties

Atmospheric Dynamics, Chemistry, and Physics

0001—Aeronomy
0002—Airglow
0003—Atmospheric chemistry
0004—Atmospheric electricity
0005—Atmospheric optics and acoustics
0006—Atmospheric thermodynamics
0007—Aurora
0008—Cloud and precipitation physics
0010—Composition
0011—Dynamics of atmospheric motion
0012—Magnetohydrodynamics
0013—Planetary atmospheres
0014—Radiation
0015—Solar-terrestrial relationships
0016—Turbulence and diffusion
0009—Other (specify)

Climatology

0101—Bioclimatology
0102—Microclimatology
0103—Paleoclimatology
0104—Physical climatology
0105—Synoptic climatology
0109—Other (specify)

Synoptic Meteorology

0201—Hydrometeorology
0202—Mesometeorology
0203—Micrometeorology
0204—Numerical analysis and prediction
0205—Observations
0206—Radar meteorology
0207—Weather analysis and forecasting
0209—Other (specify)

Area Specializations

0301—Agricultural meteorology
0302—Air pollution
0303—Aviation meteorology
0304—Marine meteorology
0305—Polar meteorology
0306—Tropical meteorology
0309—Other (specify)

Meteorological Instrumentation

0401—Automatic data sensing systems
0402—Balloon sounding systems
0403—Radar and radio instrumentation
0404—Rocket sounding systems
0405—Satellite instrumentation
0409—Other (specify)

Geochemistry

1001—Cosmochemistry
1002—General inorganic geochemistry
1003—Isotopes and geochronology
1004—Mineral synthesis and stability relations of minerals
1005—Organic geochemistry
1009—Other (specify)

Geodesy

1101—Earth motions
1102—Geodetic instrumentation
1103—Geodetic surveying
1104—Gravity
1105—Navigation, geodetic astronomy
1109—Other (specify)

Geology

1201—Areal geology
1202—Engineering geology
1203—General field geology
1204—Geology of ground water
1205—Geology of mineral deposits
1206—Geology of petroleum deposits
1207—Geology of solid fuels
1208—Glacial geology
1210—Geomorphology
1267—Mineralogy and crystallography
1211—Petrography and petrology, igneous and metamorphic
1212—Petrography and petrology, sedimentary
1213—Photogeology
1214—Stratigraphy
1215—Structural geology, igneous and metamorphic
1216—Structural geology, sedimentary
1209—Other (specify)

Paleontology

1301—Micropaleontology
1302—Paleobotany
1303—Paleontology, invertebrate
1304—Paleontology, vertebrate
1305—Palynology
1309—Other (specify)

Solid-Earth Geophysics

1401—Geomagnetism and electricity
1402—Geophysical surveying
1403—Gravity
1404—Heat flow
1405—Physical properties of materials
1406—Seismology, induced vibrations
1407—Seismology, natural vibrations
1408—Tectonophysics
1410—Volcanology
1409—Other (specify)

Geography

1501—Biogeography
1502—Cultural geography
1571—Economic geography
1503—Historical geography
1504—Military geography
1505—Philosophy of geography
1506—Physical geography
1507—Political geography
1508—Regional geography (specify region)
1510—Theoretical geography
1511—Toponymy
1509—Other (specify)

Hydrology

1601—Chemistry of water
1602—Erosion and sedimentation
1603—Evaporation and transpiration
1604—Glaciology
1605—Ground waters
1606—Precipitation
1607—Snow, ice, and permafrost
1608—Soil moisture
1610—Surface waters
1609—Other (specify)

Oceanography

1701—Biological oceanography
1702—Chemical oceanography
1703—Descriptive oceanography
1704—Hydrography
1705—Ocean-bottom processes
1706—Physical oceanography
1707—Plankton
1708—Sea-air interactions
1710—Shore and near shore processes
1711—Underwater sound
1709—Other (specify)

1909—Atmospheric, lithospheric, and hydrospheric specialties, other (specify)

Mathematics

Algebra

7001—Boolean algebra
7002—Combinatorial analysis
7003—Differential algebra
7004—Fields, rings, algebras
7005—Groups, generalizations
7006—Homological algebra
7007—Lattices
7008—Linear algebra and matrix theory
7010—Order, total and partial
7011—Polynomials
7012—Representation theory
7009—Other (specify)

Analysis and Functional Analysis

7101—Banach spaces and algebras
7102—Calculus of variations
7103—Convexity, inequalities
7169—Difference equations, functional equations
7104—Functions of real variables
7105—Functions of a complex variable
7106—Functions of several complex variables
7107—Hilbert spaces
7108—Integral equations
7110—Integral transforms
7111—Interpolation, approximation
7112—Lie groups and algebras
7113—Measure, integration, area
7114—Operational calculus
7187—Ordinary differential equations
7188—Partial differential equations
7115—Potential theory, subharmonic functions
7116—Series, summability
7117—Set theory
7118—Special functions
7119—Trigonometric series and integrals
7109—Other (specify)

Geometry

7201—Affine geometry
7202—Algebraic geometry
7203—Complex manifolds
7204—Convex domains, extremum problems
7205—Differential geometry, tensor analysis
7206—Euclidean geometry
7207—Finite geometries
7208—Foundations
7210—Integral geometry
7211—Projective, non-Euclidean geometries
7212—Riemannian geometry
7209—Other (specify)

Logic

7301—Applications of logic
7302—Formal and symbolic logic
7303—Foundations of mathematics
7304—Intuitionism
7305—Recursive functions
7309—Other (specify)

Mathematics of Resource Use

7401—Activity analysis
7402—Actuarial mathematics
7403—Biometrics, biostatistics
7404—Control systems
7405—Cryptography
7406—Dynamic programming
7470—Econometrics
7407—Game theory
7408—Information and communication theory
7410—Logistics, military
7486—Operations research, general
7411—Weapons systems evaluation
7412—Theory of the firm
7413—Linear programming
7414—Non-linear programming
7415—Network flow
7416—Queuing
7417—Scheduling
7418—Distribution and transportation
7419—Inventory
7420—Replacement and renewal
7421—System reliability
7422—Adaptive systems
7423—Management gaming
7409—Other (specify)

Number Theory

7501—Algebraic number theory
7502—Analytic number theory
7503—Diophantine problems
7504—Elementary number theory
7505—Geometry of numbers
7509—Other (specify)

Numerical Methods and Computation

7601—Algorithm construction
7602—Analogue systems, coding and programming
7669—Difference and functional equations
7603—Digital computers, operating systems, programming (Program preparation, monitoring, debugging)
7604—Digital computers, simulation and gaming
7605—Digital computers, design and translation of artificial languages
7606—Digital computers, machine translation of natural languages
7677—Digital computers, information retrieval
7607—Digital computers, control systems
7608—Digital computers, heuristic programming
7610—Digital computers, design
7611—Eigenvalues
7612—Error analysis
7613—General methods, iteration
7614—Interpolation, approximation, curve-fitting
7615—Integral and integro-differential equations
7616—Linear equations, matrices
7617—Nomography, tables
7618—Numerical differentiation, quadrature
7687—Ordinary differential equations
7688—Partial differential equations
7609—Other (specify)

Topology

7701—Abstract spaces
7702—Applications to analysis
7703—Fibre bundles and spaces
7704—Graphs
7705—Homology, cohomology
7706—Homotopy
7707—Manifolds, Kaehler spaces
7708—Mappings
7710—Point-set topology
7711—Topological dynamics
7712—Topological groups
7709—Other (specify)

Probability

7801—Analytic probability theory
7802—Applications of probability
7803—Foundations of probability
7804—Limit theorems
7805—Stochastic processes, general
7806—Markov processes
7807—Theory of generating functions
7808—Time series
7809—Other (specify)

7909—Mathematics, other (specify)

Biology

Anatomy

2001—Comparative
2002—Embryology; developmental
2072—Endocrines
2003—Gross
2004—Histological
2005—Neuroanatomy
2006—Pathological
2007—Sense organs
2008—Surgical
2010—Topographic; systemic
2098—Veterinary
2009—Other (specify)

Botany

2101—Bryology
2102—Dendrology
2103—Limnology
2104—Mycology
2105—Nutrition and growth
2106—Parasitology
2107—Phycology
2108—Plant anatomy and morphology
2110—Plant physiology
2111—Pteridology
2194—Taxonomy
2109—Other (specify)

Ecology

2257—Animal
2289—Plant
2209—Other (specify)

Entomology

2301—Agricultural
2302—Apiculture
2303—Control, chemical
2304—Control, other
2305—Forest
2306—Insect pests
2307—Insect physiology, morphology, development
2308—Medical
2394—Taxonomy
2309—Other (specify)

Genetics

2457—Animal
2401—Human
2483—Microorganisms
2489—Plant
2402—Population studies
2409—Other (specify)

Immunology

2501—Allergies
2502—Antibody formation
2503—Antigens; antibodies
2504—Antigen-antibody reaction
2505—Blood groups
2565—Cell culture
2506—Complement
2507—Hypersensitivity
2508—Immunochemistry
2510—Infection, resistance
2511—Tissue antibodies, auto-antibodies
2596—Transplantation
2597—Vaccines
2509—Other (specify)

Microbiology

2658—Antibiotics
2601—Bacteriology
2660—Bacteriophage
2602—Biologicals
2665—Cell culture
2666—Clinical and diagnostic
2668—Cytology; morphology
2603—Food products
2681—Metabolism
2682—Microbial processes, syntheses
2604—Mycology
2605—Parasitology
2606—Protozoology
2694—Taxonomy
2609—Other (specify)

Nutrition

2754—Amino acids, peptides, proteins
2757—Animal
2759—Atherosclerosis
2763—Carbohydrates
2765—Cell; tissue culture
2766—Clinical
2701—Digestion
2702—Energy metabolism
2774—Enzymes; coenzymes
2703—Food and feed additives
2704—Food pathogens; toxicity
2705—Food technology
2779—Lipids
2706—Minerals; trace elements
2707—Nutritional diseases
2708—Nutrients; nutrient values
2710—Requirements; deficiencies
2792—Steroids
2790—Vitamins
2709—Other (specify)

Pathology

2859—Atherosclerosis
2864—Cardiovascular
2865—Cell; tissue culture
2866—Clinical
2873—Endotoxins
2875—Hematology
2801—Immunopathology
2885—Oncology; carcinogenesis
2890—Radiation
2802—Thrombosis
2896—Transplantation
2809—Other (specify)

Pharmacology

2B01—Autonomic
2B61—Biochemical
2B64—Cardiovascular
2B02—Cellular
2B03—Chemotherapy
2B66—Clinical
2B04—Drug metabolism
2B72—Endocrines
2B05—Neuropharmacology
2B06—Pharmacodynamics
2B07—Psychopharmacology
2B08—Renal
2B10—Toxicology
2B09—Other (specify)

Physiology

2X01—Altitude, environment, stress, space, exercise
2X56—Anesthesiology
2X64—Cardiovascular
2X65—Cell; tissue culture
2X02—Central nervous system
2X03—Electrolyte, water balance
2X72—Endocrines
2X04—Gastrointestinal
2X75—Hematology
2X79—Lipids
2X81—Metabolism
2X05—Muscle
2X06—Neurophysiology
2X90—Radiation
2X91—Renal
2X07—Reproduction
2X08—Respiration
2X10—Temperature regulation
2X11—Transport
2X96—Transplantation
2X09—Other (specify)

Phytopathology

3001—Bacterial
3002—Disease control, chemical
3003—Disease control, other
3004—Fungal
3005—Host resistance
3006—Nematodal
3007—Physiogenic
3008—Viral
3009—Other (specify)

Virology

3101—Arbor viruses
3160—Bacteriophage
3102—Dermatropic viruses
3103—Enteric viruses
3104—Interference, latency
3105—Neurotropic viruses
3106—Pantropic viruses
3107—Pox viruses
3108—Respiratory viruses
3197—Vaccines
3110—Viscerotropic viruses
3109—Other (specify)

Zoology

3268—Cytology
3201—Development and growth
3202—Herpetology
3203—Ichthyology
3204—Invertebrate
3205—Limnology
3206—Mammalogy
3207—Ornithology
3208—Parasitology
3210—Protozoology
3294—Taxonomy
3211—Vertebrate
3209—Other (specify)

Agronomy

3362—Crop breeding, hybridization
3301—Crop management
3302—Field crops
3303—Pasture and forage crops
3304—Seeds
3305—Turf and ornamental crops
3306—Weed control
3309—Other (specify)

Animal Husbandry

3401—Large animal
3402—Poultry
3403—Small animal
3409—Other (specify)

Fish and Wildlife

3501—Controls
3502—Food habits
3503—Habitat influences
3504—Population dynamics
3505—Propagation and management
3509—Other (specify)

Forestry

3601—Erosion control
3602—Management
3603—Products
3604—Protection
3605—Range management
3606—Silviculture
3607—Watershed management
3609—Other (specify)

Horticulture

3762—Breeding, hybridization
3701—Floriculture
3702—Fruits
3703—Vegetables
3709—Other (specify)

Other Bio-Medical Specialties

3801—Dentistry
3802—Epidemiology
3803—Internal medicine
3804—Pediatrics
3805—Psychiatry
3806—Public health
3807—Surgery
3808—Veterinary medicine
3809—Other (specify)

2909—Biology, other (specify)

Psychology

Clinical Psychology

9001—Behavior problems
9002—Crime and delinquency
9003—Experimental psychopathology
9004—Group therapy
9005—Individual diagnosis
9006—Mental deficiency
9007—Objective tests
9008—Projective techniques
9010—Psychotherapy
9011—Speech pathology
9009—Other (specify)

Counseling and Guidance

9101—Educational counseling
9102—Nondirective therapy
9103—Personal adjustment
9104—Rehabilitation
9105—Vocational counseling
9109—Other (specify)

Developmental Psychology

9201—Childhood and adolescence
9202—Maturity and old age
9203—Nursery and pre-school
9209—Other (specify)

Educational Psychology

9301—Educational measurement
9302—Programmed learning
9303—School adjustment
9304—School learning
9305—Special education
9306—Student personnel
9307—Teacher personnel
9309—Other (specify)

9401—Engineering Psychology

General Psychology

9576—History and biography
9501—Theory and systems
9509—Other (specify)

Industrial and Personnel Psychology

9601—Employee and executive training and development
9602—Employee morale and attitudes
9603—Job analysis and position classification
9604—Labor-management relations
9605—Market research, advertising
9606—Performance evaluation, criterion development
9607—Recruiting, selection, placement
9608—Safety research and training
9610—Salary and pay plans
9609—Other (specify)

Personality

9701—Development
9702—Measurement
9703—Personality and body
9704—Personality and learning
9705—Personality and perception
9706—Personality theory
9707—Structure and dynamics
9709—Other (specify)

9801—School Psychology

9909—Psychology, other (specify)

Sociology

B001—Applied Sociology (specify)

B101—General Sociology

Methodology

B201—Computer techniques
B202—Experimental sociology
B203—Field data collection
B204—Measurement and index construction
B205—Model building
B206—Qualitative analysis
B207—Statistical analysis
B208—Survey design
B209—Other (specify)

Population

B301—Internal migration
B302—International migration
B303—Labor force
B304—Population characteristics
B305—Population trends
B306—Vital statistics
B309—Other (specify)

Rural-Urban Sociology

B401—Community studies
B402—Human ecology
B403—Rural sociology
B404—Urban sociology
B409—Other (specify)

Social Change and Development

B501—Invention and innovation
B502—Social control
B503—Social process
B504—Social mobility
B505—Socio-economic development
B509—Other (specify)

Social Organization, Structure, and Institutions

B601—Bureaucracy
B602—Cultural—the Arts
B603—Educational
B604—Family
B605—Industrial
B606—Intergroup
B607—Knowledge
B608—Legal
B610—Medical
B611—Occupational
B612—Political
B613—Religious
B614—Scientific
B615—Stratification
B609—Other (specify)

Social Problems, Social Disorganization

B701—Criminology
B702—Deviance
B703—Poverty and dependence
B704—Social conflict
B709—Other (specify)

B909—Sociology, other (specify)

Economics

General Economic Theory

5001—General equilibrium (including general welfare economics)
5002—Economic fluctuations
5003—Economic forecasting
5004—Macroeconomic theory
5005—Methodology
5006—Microeconomic theory
5009—Other (specify)

Economic History; History of Thought

5176—Economic history
5101—History of thought
5109—Other (specify)

Economic Systems; Development and Planning

5201—Economic systems
5202—Economic planning
5203—National economic development
5204—Regional economic development
5209—Other (specify)

Economic Statistics

5370—Econometrics
5301—Input-output and programming methods
5302—Social accounting
5303—Statistical methods
5309—Other (specify)

Monetary and Fiscal Theory and Institutions

5401—Central government finance; fiscal policy
5402—Commercial banking and other short-term credit
5403—Consumer finance and mortgage credit
5404—Monetary theory and policy
5405—State and local finance
5409—Other (specify)

International Economics

5501—Foreign exchange, international finance
5502—Imperialism; colonialism
5503—Trade; commercial policy
5509—Other (specify)

Business Finance and Administration; Marketing and Accounting

5601—Accounting
5602—Advertising and sales
5603—Business finance
5604—Business organization
5605—Insurance (private)
5606—Investment and security markets
5607—Managerial economics and industrial management
5608—Marketing
5609—Other (specify)

Industrial Organizations; Government and Business; Industry Studies

5701—Industrial organization and market structure; business, price, and related policies
5702—Policies concerning competition and monopoly; government ownership and operation; wartime operations and control
5703—Public utilities; transportation, communications
5704—Studies of manufacturing, construction, and service industries
5709—Other (specify)

Land Economics

5801—Agricultural economics; forestries and fisheries
5871—Economic geography
5802—Natural resources; mining
5809—Other (specify)

Labor Economics

5B01—Labor markets
5B02—Public policy; role of government
5B03—Trade unions; collective bargaining; labor management relations
5B04—Wages, hours, conditions of employment
5B09—Other (specify)

Population; Welfare Programs; Standards of Living

5X01—Consumer economics; level and standards of living
5X02—Population; migration
5X03—Public housing
5X04—Welfare programs and social security
5X09—Other (specify)

5909—Economics, other (specify)

Linguistic Specialties

Applications to Language Teaching

6001—Language aptitude testing
6002—Language proficiency testing
6003—Linguistic principles of second language pedagogy
6004—Linguistics and the design of language textbooks
6005—Utilization of language laboratories
6006—Vocabulary selection
6009—Other (specify)

Descriptive Linguistics

6101—Contrastive structure studies
6102—Dialect geography
6103—Field methods
6104—Graphemics
6105—Kinesics
6106—Lexicography
6107—Metrics
6108—Morphology
6110—Paralanguage
6111—Phonology
6112—Structural analysis
6113—Syntax
6109—Other (specify)

General Linguistics

6201—Bilingualism
6202—Children's language
6203—Language typology
6204—Language universals
6205—Logical basis of linguistic theory
6206—Mathematical models in linguistics
6207—Statistical studies of language
6208—Study of meaning
6210—Theory of grammar
6211—Theory of translation
6209—Other (specify)

Historical and Comparative Linguistics

6301—Etymology
6302—Glottochronology
6303—History of specific languages
6304—Processes of language change
6305—Reconstruction
6306—Subgrouping
6309—Other (specify)

Language in Relation to Other Fields

6401—Animal communication
6476—History of linguistics
6402—Language and culture
6480—Language and literature
6403—Physiology of speech and hearing
6404—Psycholinguistics
6405—Sociology of language
6409—Other (specify)

Language Policies

6501—Language standardization
6502—Problems of linguistic minorities
6503—Translation of technical terminology
6504—Use of vernacular in education
6509—Other (specify)

Literacy and Writing Systems

6601—Devising of writing systems
6602—Materials for new literates
6603—Teaching of literacy
6609—Other (specify)

Mechanized Applications

6701—Application of linguistics to automatic abstracting
6702—Application of linguistics to information retrieval
6703—Automated linguistic analysis
6704—Linguistic problems of machine translation
6709—Other (specify)

Phonetics

6801—Acoustic phonetics
6802—Articulatory and instrumental phonetics
6803—Instrumentation
6804—Phonetic transcription
6805—Speech spectrography
6806—Speech synthesis
6807—X-ray studies
6809—Other (specify)

6909—Linguistics, other (specify)

Interdisciplinary Specialties

Agricultural and Food Chemistry

X101—Alcoholic beverages
X102—Animal and vegetable fats, oils
X103—Animal feeds
X104—Bakery and confectionery products
X105—Cereals, carbohydrates
X106—Fertilizer processing
X107—Flavors
X108—Food and feed additives
X110—Fruits, vegetables, juices
X111—Meat, fish, dairy, and poultry products
X183—Microorganisms; bacteria, yeasts, algae, mold
X112—Nonalcoholic beverages
X113—Pesticides; insecticides, herbicides, fungicides
X114—Plant growth regulators
X109—Other (specify)

Biochemistry

X254—Amino acids, peptides, proteins
X201—Antimetabolites
X202—Biochemical mechanisms
X263—Carbohydrates
X266—Clinical
X203—Cyto-histochemistry
X272—Endocrines
X274—Enzymes, coenzymes
X204—Fermentation
X205—Intermediary metabolism, biosynthesis
X279—Lipids (phospho-, glyco-, fats, oils)
X261—Medicinal chemistry
X282—Microbial processes, syntheses
X206—Microbiological chemistry
X207—Nucleic acids (purines, pyrimidines)
X285—Oncology, carcinogenesis
X208—Photosyntheses
X210—Physical biochemistry
X292—Steroids
X211—Technology, methodology
X299—Vitamins
X209—Other (specify)

Biophysics

X301—Bioacoustics
X302—Bioelectricity
X303—Bio-optics
X304—Biosystems, control communications
X305—Biothermics and bioenergetics
X306—Biotransport, membrane physics
X307—Cellular
X367—Crystallography
X308—Health physics
X310—Methodology, instrumentation
X311—Molecular
X390—Radiation
X309—Other (specify)

Electronics

X401—Electron ballistics
X402—Electron tubes
X403—Electronic device circuitry
X404—Electronics instrumentation
X405—Emission
X406—Gas devices
X407—Gaseous electronics
X408—Semiconductor devices
X410—Solid state electronics
X409—Other (specify)

Experimental, Comparative, and Physiological Psychology

X501—Animal learning
X502—Apparatus design and evaluation
X503—Audition
X504—Autonomic functions
X505—CNS functions
X506—Communications research, information theory
X507—Electroencephalography
X508—Feeling and emotion
X510—Human learning
X511—Motivation
X512—Motor skills
X513—Perception
X514—Psychophysics
X515—Sensory processes
X516—Symbolic processes, problem solving
X517—Vision
X509—Other (specify)

Physical Chemistry

X601—Catalysis
X602—Chemical kinetics
X603—Colloid chemistry
X604—Crystal structure
X653—Determination of physical constants
X605—Electrochemistry
X606—Electrodeposition
X607—Flames and explosives
X608—Fused salts
X610—High pressure chemistry
X611—High temperature chemistry
X612—Ion exchange and applications
X613—Low temperature studies
X614—Molecular dynamics
X615—Molecular energy levels
X616—Molecular geometry
X617—Nuclear chemistry
X618—Phase equilibria
X619—Photochemistry and energy transfer
X620—Polymer chemistry
X621—Radiation chemistry
X622—Solid state chemistry
X623—Solutions of electrolytes and nonelectrolytes
X624—Surface chemistry
X625—Thermochemistry
X695—Thermodynamics
X626—Valence theory
X609—Other (specify)

Psychometrics

X701—Experimental design
X702—Factor analysis
X703—High-speed computers
X704—Mathematical models
X705—Test construction, validation
X706—Test theory, scale analysis
X709—Other (specify)

Soil Specialties

X801—Fertility, management
X802—Soil bacteriology
X803—Soil chemistry
X804—Soil genesis, classification and mapping
X805—Soil mechanics and engineering
X806—Soil mineralogy
X807—Soil conservation
X809—Other (specify)

Social Psychology

XB01—Attitudes
XB02—Collective behavior and social movements
XB03—Culture and personality
XB04—Group interaction
XB05—Leadership
XB06—Public opinion
XB07—Reference groups
XB08—Role behavior
XB10—Social perception
XB11—Symbolic communication
XB09—Other (specify)

Statistics

7B55—Analytical statistics
7B01—Decision theory, sequential analysis
7B02—Design and analysis of experiments
7B03—Estimation and testing, parametric
7B04—Multivariate analysis
7B05—Non-parametric methods
7B06—Quality control
7B07—Sampling techniques
7B83—Survey methods: including forms design, data collection and data processing
7B08—Theory of statistical inference
7B10—Time series analysis
7B09—Other (specify)

Other Specialties

XX01—Abstracting
XX02—Anthropology
XX03—Archeology
XX04—Cartography
XX05—Code development
XX51—Compiling and editing
XX06—Demography
XX07—Education
XX08—Fine and applied arts
XX10—History
XX76—History of science, social science, and mathematics
XX11—Home economics
XX12—Indexing
XX13—Industrial hygiene and occupational health
XX77—Information retrieval
XX14—Information system design
XX15—Journalism
XX16—Law, jurisprudence
XX17—Library and archival science
XX80—Literature of science, social science, and mathematics
XX18—Music
XX84—Nomenclature
XX19—Patent law
XX20—Philosophy
XX21—Photogrammetry
XX22—Political science
XX23—Project appraisal and control
XX24—Public administration
XX25—Speech
XX26—Tariffs
XX52—Teaching of science, social science, and mathematics
XX27—Translation
XX09—Other (specify)

Engineering

X901—AERONAUTICAL AND ASTRONAUTICAL ENGINEERING
X902—AGRICULTURAL ENGINEERING
X903—ARCHITECTURAL ENGINEERING
X904—CERAMIC ENGINEERING
X905—CHEMICAL ENGINEERING
X906—CIVIL ENGINEERING
X907—CONSTRUCTION ENGINEERING
X908—ELECTRICAL ENGINEERING
X910—ELECTRONIC ENGINEERING
X911—ENGINEERING MECHANICS
X912—ENGINEERING GENERAL
X913—ENGINEERING PHYSICS
X914—ENGINEERING SCIENCE
X915—GEOLOGICAL ENGINEERING
X916—GEOPHYSICAL ENGINEERING
X917—INDUSTRIAL ENGINEERING
X918—MATERIALS ENGINEERING
X919—MECHANICAL ENGINEERING
X920—METALLURGICAL/PHYSICAL METALLURGY ENGINEERING
X921—MINERAL ENGINEERING
X922—MINING/MINING GEOLOGY ENGINEERING
X923—NAVAL ARCHITECTURAL/MARINE ENGINEERING
X924—NUCLEAR ENGINEERING
X925—PETROLEUM/PETROLEUM REFINING ENGINEERING
X926—SANITARY ENGINEERING
X927—TEXTILE ENGINEERING
X928—TRANSPORTATION ENGINEERING
X929—WELDING ENGINEERING
X909—ENGINEERING, OTHER (specify)

APPENDIX C

Subfields Included in Each Scientific and Technical Field

Chemistry

Analytical chemistry
Inorganic chemistry
Organic chemistry
Related chemical specialties
Chemistry, other
Agricultural and food chemistry
Biochemistry
Physical chemistry

Earth sciences

Geochemistry
Geodesy
Geology
Paleontology
Solid-earth geophysics
Geography
Hydrology
Oceanography
Atmospheric, lithospheric, and hydrospheric specialties, other

Meteorology

Atmospheric dynamics, chemistry, and physics
Climatology
Synoptic meteorology
Area specializations
Meteorological instrumentation

Physics

Acoustics
Atomic and molecular physics
Electromagnetism
Elementary particles
Mechanics
Nuclear physics
Optics
Physics of fluids
Solid state physics
Physics, other

Physics—Continued

Thermal physics
Other physics specialties
Astronomy
Electronics

Mathematics

Algebra
Analysis and functional analysis
Geometry
Logic
Mathematics of resource use
Number theory
Numerical methods and computations
Topology
Probability
Mathematics, other

Agricultural sciences

Agronomy
Animal husbandry
Fish and wildlife
Forestry
Horticulture
Soil specialties

Biological sciences

Anatomy
Botany
Ecology
Entomology
Genetics
Immunology
Microbiology
Nutrition
Pathology
Biology, other
Pharmacology
Physiology
Phytopathology

Biological sciences—Continued

Virology
Zoology
Other bio-medical specialties
Biophysics

Psychology

Clinical psychology
Counseling and guidance
Developmental psychology
Educational psychology
Engineering psychology
General psychology
Industrial and personnel psychology
Personality
School psychology
Psychology, other
Experimental, comparative, and physiological psychology
Psychometrics
Social psychology

Statistics

Statistics

Economics

General economic theory
Economic history; history of thought
Economic systems; development and planning
Economic statistics
Monetary and fiscal theory and institutions
International economics
Business finance and administration; marketing and accounting
Industrial organizations; government and business; industry studies

Subfields Included in Each Scientific and Technical Field—Continued

Economics—Continued

Land economics
Economics, other
Labor economics
Population; welfare programs; standards of living

Sociology

Applied sociology
General sociology
Methodology
Population
Rural-Urban sociology

Sociology—Continued

Social change and development
Social organization, structure, and institutions
Social problems, social disorganization
Sociology, other

Linguistics

Application to language teaching
Descriptive linguistics
General linguistics
Historical and comparative linguistics

Linguistics—Continued

Language in relation to other fields
Language policies
Literacy and writing systems
Mechanized applications
Phonetics
Linguistics, other

Other

Other specialties
Engineering

APPENDIX D

Language Family List Used by the National Register

Indo-European

Indic

Hindi-Urdu
Bengali
Gujerati
Singhalese
Marathi
Oriya
Panjabi
Indic, other

Iranian

Persian
Pashtu
Kurdish
Iranian, other

Balto-Slavic

Baltic
  (Lithuanian and Lettish)
Russian
Polish
Czech and Slovak
Serbo-Croatian
Bulgarian
Ukrainian
Slavic, other

Romance

French
Spanish
Italian
Portuguese
Rumanian
Romance, other

Germanic

German
Swedish
Dutch
[redacted]
Danish
Germanic, other

Indo-European—Con.

Indo-European, other

Celtic
Modern Greek
Armenian
Albanian
Indo-European, other

Afro-Asiatic

Semitic

Arabic
Hebrew
Amharic
Semitic, other

Afro-Asiatic, other

Berber
Cushitic
Hausa and Afro-Asiatic, other

African

Niger-Congo

Swahili
Xhosa and Zulu
Bantu, other
Akan (Twi and Fante)
Ibo
Yoruba
Fula(ni) (Fulbe, Ful, Peul, or
  Peuhl)
Niger-Congo, other

Sub-Saharan African, other

Uralic-Altaic

Osmanli Turkish
  (Istanbul and Anatolian)
Turkic, other
Mongolian
Altaic, other
Hungarian

Uralic-Altaic—Con.

Finnish
Estonian and other Balto-Finnic
Uralic, other

East-Asian

Sino-Tibetan

Mandarin Chinese
Chinese, other
Thai-Lao
Burmese
Tibetan
Vietnamese
Cambodian (Khmer)
Southeast Asian, other
Japanese
Korean

Malayo-Polynesian

Indonesian

Malay and Bahasas Indonesian
Javanese
Sundanese
Madurese
Tagalog
Visayan
Ilocano
Malagasy
Indonesian, other

Malayo-Polynesian, other

Polynesian
Melanesian
Micronesian

Dravidian

Tamil
Telugu

Language Family List Used by the National Register—Continued

Dravidian—Continued

Malayalam
Kannada
Dravidian, other

American Indian

North American Indian

Navaho

American Indian—Con.

North American Indian—Con.

North American Indian, other

Central American Indian, including Uto-Aztecan

South American Indian

Guarani
Quechua
South American Indian, other

Caucasian

Georgian
Caucasian, other

Miscellaneous

Papuan-Australian
Creoles and Pidgins
Other languages not included in any of the above categories

APPENDIX E

Foreign Area List Used by the National Register

Africa

- United Arab Republic (Egypt)
- Northern Africa
  - Algeria
  - Canary Islands
  - Ceuta
  - Ifni
  - Libya
  - Morocco
  - Rio de Oro
  - Sahara, Spanish
  - Tangier
  - Tunisia
- Africa, East Central
  - Eritrea
  - Ethiopia (Abyssinia)
  - Mali
  - Mauritania
  - Somalia
  - Somaliland, French
  - Sudan
- Africa, West Central
  - Cameroons, British
  - Cape Verde Islands
  - Chad
  - Dahomey
  - Gambia
  - Ghana (Gold Coast)
  - Guinea
  - Guinea, Portuguese
  - Ivory Coast
  - Liberia
  - Niger
  - Nigeria
  - Senegal
  - Sierra Leone
  - Togo
  - Upper Volta
  - West Africa, British

Africa—Continued

- Africa, Central
  - Angola
  - Cameroun
  - Central Africa Republic
  - Congo
  - Fernando Po Islands
  - Gabon
  - Guinea, Spanish
  - Portuguese West Africa
  - Rio Muni
  - Ruanda-Urundi
  - Spanish Equatorial Region
- Africa, East South Central
  - Basutoland
  - Bechuanaland
  - British South Africa
  - Comoro Islands
  - Kenya
  - Malagasy (Madagascar)
  - Mozambique
  - Nyasaland
  - Pemba
  - Portuguese East Africa
  - Prencipe
  - Rhodesia
  - Rhodesia, Northern
  - Rhodesia, Southern
  - St. Helena
  - San Tome
  - Swaziland
  - Tanganyika
  - Uganda
  - Zanzibar
- Africa, Southern
  - Republic of South Africa
  - South-West Africa
  - Union of South Africa

Asia

- China, including
  - Hong-Kong
  - Macao
  - Manchuria
  - Sinkiang
  - Tibet
- Southeast Asia
  - Burma
  - Cambodia
  - Laos
  - Malaya
  - Singapore
  - Thailand (Siam)
  - Vietnam
- Indian Subcontinent
  - Afghanistan
  - Andaman Islands
  - Bhutan
  - Ceylon
  - Damao
  - Diu
  - Goa
  - India
  - Maldive Island
  - Mauritius Island
  - Nepal
  - Pakistan
  - Portuguese India
  - Seychelles Islands
- Japan, including
  - Okinawa
  - Ryukyus
- Korea
- Formosa (Taiwan)
  - Nationalist Chinese Islands
- Philippines
- Northern Asia
  - Arctic, Siberian
  - Kazakh (USSR)

Foreign Areas List Used by the National Register—Continued

Asia—Continued

- Northern Asia—Continued
  - Khirghiz (USSR)
  - Kuriles (USSR)
  - Sakhalin (USSR)
  - Siberia (USSR)
  - Tadzhik (USSR)
  - Turkmen (USSR)
  - Uzbek (USSR)
- Mongolia

Asia Minor

- Arabian Peninsula
  - Aden
  - Bahrain
  - Kuwait
  - Muscat
  - Oman
  - Qatar
  - Saudi Arabia
  - Socotra
  - Trucial
  - Yemen
- Iran (Persia)
- Iraq (Mesopotamia)
- Jordan, Lebanon, Syria
- Israel (Palestine)
- Turkey

Australia, New Zealand, and East Indies

- Australia
  - Nauru
  - Norfolk Island
  - Papua
  - Tasmania
- New Zealand
  - American Samoa
  - Cook Islands
  - Niue
  - Western Samoa
- New Guinea and adjacent islands
  - Admiralties
  - British Solomon Islands
  - Fiji Islands
  - French Polynesia
  - Gilbert and Ellice Islands
  - Netherlands New Guinea

Australia, New Zealand, and East Indies—Continued

- New Guinea and adjacent islands—Continued
  - New Britain
  - New Caledonia
  - New Guinea
  - New Hebrides
  - New Ireland
  - Pitcairn Island
  - Tahiti
  - Tonga Island
  - Tokelau Islands
- Indonesia
  - Bali
  - Bangka
  - Borneo
  - Celebes
  - Ceram
  - Flores
  - Halmahera
  - Java
  - Lombok
  - Soela
  - Sumatra
  - Sumba
  - Sumbawa
  - Timor
- Portuguese Timor and Ambeno
- Sarawak, Brunei, North Borneo

Western Europe

- Scandinavian Peninsula
  - Denmark
  - Faeroe Islands
  - Finland
  - Iceland
  - Norway
  - Spitsbergen
  - Sweden
- Great Britain
  - Channel Islands
  - England
  - Hebrides
  - Ireland (Eire)
  - Isle of Man
  - Northern Ireland
  - Scotland

Western Europe—Continued

- Great Britain—Continued
  - Shetland Islands
  - Wales
- Benelux Countries
  - Belgium
  - Luxembourg
  - Netherlands
- Germany
- France, Corsica, Monaco
- Austria, Liechtenstein, Switzerland
- Iberian Peninsula
  - Andorra
  - Azores
  - Balearic Isles
  - Gibraltar
  - Madeira Isles
  - Portugal
  - Spain
- Adriatic Islands
- Aegean Sea Islands
- Cyprus
- Greece
- Yugoslavia
- Italy
- Elba
- Goza
- Malta
- San Marino
- Sardinia
- Sicily
- Vatican City

Eastern Europe

- Russia
  - Armenia (USSR)
  - Azerbaidzhan (USSR)
  - Bessarabia (USSR)
  - Byelorussia (USSR) (White Russia)
  - Georgia (USSR)
  - Moldavia (USSR)
  - Ukraine (USSR)
- Estonia (USSR)
- Latvia (USSR)
- Lithuania (USSR)
- Poland

Foreign Area List Used by the National Register—Continued

Eastern Europe—Continued

- Czechoslovakia
- Rumania
- Bulgaria
- Hungary
- Albania

North America (except U.S.)

- Canada and St. Pierre and Miquelon Islands
- Greenland
- Central America
  - British Honduras
  - Canal Zone
  - Costa Rica
  - El Salvador
  - Guatemala
  - Honduras
  - Nicaragua
  - Panama
- Mexico

North America (except U.S.)—Continued

- West Indies
  - Antigua
  - Barbados
  - Caicos Island
  - Cayman Island
  - Grenada
  - Grenadines
  - Jamaica
  - Leeward Islands
  - Netherlands Antilles
  - Trinidad-Tobago
  - Turks Island
  - Windward Islands
- Bahamas
- Bermuda
- Guadaloupe
- Martinique
- Puerto Rico
- Virgin Islands
- Cuba
- Dominican Republic
- Haiti

South America

- Argentina and Paraguay
- Brazil
- Bolivia, Chile
- Colombia
- Ecuador, Galapagos Islands, Peru
- British Guiana, French Guiana, Surinam (Dutch Guiana)
- Uruguay
- Venezuela

Miscellaneous

- Antarctica, Falkland Islands
- Arctica
- Midway Island
- Pacific Islands not elsewhere classified
- Atlantic Islands not elsewhere classified
- Indian Ocean Islands not elsewhere classified
- Other islands not elsewhere classified
- International Waters

☆ U.S. GOVERNMENT PRINTING OFFICE : 1967—O-235-688